		DEPARTMENT	TATE OF UTAH OF NATURAL R OF OIL, GAS AND				FORI			
APPLI	CATION FOR	R PERMIT TO DRILL	L			1. WELL NAME and	NUMBER NBU 921-25I4AS			
2. TYPE OF WORK DRILL NEW WELL	REENTER P	&A WELL DEEPE	EN WELL			3. FIELD OR WILDCAT NATURAL BUTTES				
4. TYPE OF WELL Gas Wo	ell Coal	bed Methane Well: NO				5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES				
6. NAME OF OPERATOR KERF	R-MCGEE OIL &	GAS ONSHORE, L.P.				7. OPERATOR PHONE 720 929-6007				
8. ADDRESS OF OPERATOR	. Box 173779.	Denver, CO, 80217				9. OPERATOR E-MAIL Kathy.SchneebeckDulnoan@anadarko.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)		11. MINERAL OWNE		_		12. SURFACE OWN	ERSHIP			
UO 0868 ST	_ (61)	FEDERAL IND	DIAN DIAN STATE	(0)	FEE ()		DIAN STATE (
13. NAME OF SURFACE OWNER (if box 12						14. SURFACE OWN				
15. ADDRESS OF SURFACE OWNER (if box	12 = 'fee')					16. SURFACE OWN	ER E-MAIL (if box 1	l2 = 'fee')		
17. INDIAN ALLOTTEE OR TRIBE NAME		18. INTEND TO COM		CTION	FROM	19. SLANT				
(II DOX 12 - INDIAN)		YES (Submit C	Commingling Applic	ation)	ио 🔵	VERTICAL DIF	RECTIONAL 📵 🛚 HO	ORIZONTAL 🛑		
20. LOCATION OF WELL		OOTAGES	QTR-QTR		SECTION	TOWNSHIP	RANGE	MERIDIAN		
OCATION AT SURFACE 204		FSL 686 FEL	NESE		25	9.0 S	21.0 E	S		
Top of Uppermost Producing Zone	1882	FSL 91 FEL	NESE		25	9.0 S	21.0 E	S		
At Total Depth	1882	FSL 91 FEL	NESE		25	9.0 S 21.0 E		S		
21. COUNTY UINTAH		22. DISTANCE TO N	EAREST LEASE L 91	INE (Fe	eet)	23. NUMBER OF ACRES IN DRILLING UNIT				
				SAME	POOL					
27. ELEVATION - GROUND LEVEL		28. BOND NUMBER	22042542				PROVAL NUMBER 1	F APPLICABLE		
4983			22013542				remii #45-6490			
		Α-	TTACHMENTS							
VERIFY THE FOLLOWING	ARE ATTACI	HED IN ACCORDAN	CE WITH THE	UTAH	OIL AND	GAS CONSERVATI	ON GENERAL RU	ILES		
WELL PLAT OR MAP PREPARED BY	LICENSED SU	RVEYOR OR ENGINEE	R CC	MPLET	E DRILLING	PLAN				
AFFIDAVIT OF STATUS OF SURFACE	OWNER AGR	EEMENT (IF FEE SURF	FACE) FO	RM 5. I	F OPERATO	R IS OTHER THAN T	HE LEASE OWNER			
DRILLED)	RECTIONALLY	OR HORIZONTALLY	г то	POGRA	PHICAL MA	P				
NAME Danielle Piernot	-	TITLE Regulatory Analys	st		PHONE 72	20 929-6156				
SIGNATURE	1	DATE 08/17/2010			EMAIL gn	bregulatory@anadarko	o.com			
VES Section No Vertical Directional Horizontal										
					Derr	nit Manager				

API Well No: 43047512710000 Received: 8/17/2010

	Prop	osed Hole, Casing, ar	ıd Cement		
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)	
Prod	7.875	4.5	0	9667	
Pipe	Grade	Length	Weight		
	Grade I-80 Buttress	9667	11.6		

API Well No: 43047512710000 Received: 8/17/2010

	Proj	oosed Hole, Casing, a	and Cement			
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	11	8.625	0	2370		
Pipe	Grade	Length	Weight			
	Grade I-80 LT&C	2370	28.0			
					Τ	Г

NBU 921-25I4AS

Pad: NBU 921-25I

Surface: 2,045' FSL 686' FEL (NE/4SE/4) BHL: 1,882' FSL 91' FEL (NE/4SE/4) Section 25 T9S R21E

> Uintah County, Utah Mineral Lease: UO 0868 ST

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. – 2. Estimated Tops of Important Geologic Markers: Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	Resource
Uinta	0 – Surface	
Green River	1,455'	
Birds Nest	1,747'	Water
Mahogany	2,119'	Water
Wasatch	4,699'	Gas
Mesaverde	7,343'	Gas
MVU2	8,304'	Gas
MVL1	8,851'	Gas
TVD	9,594'	
TD	9.667'	

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program.

5. Drilling Fluids Program:

Please refer to the attached Drilling Program.

Evaluation Program:

Please refer to the attached Drilling Program.

7. <u>Abnormal Conditions</u>:

Maximum anticipated bottomhole pressure calculated at 9,594' TVD, approximately equals 6,077 psi (calculated at 0.63 psi/foot).

Maximum anticipated surface pressure equals approximately 3,966 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. <u>Anticipated Starting Dates:</u>

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion

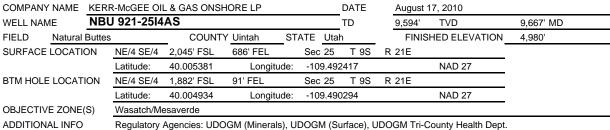
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

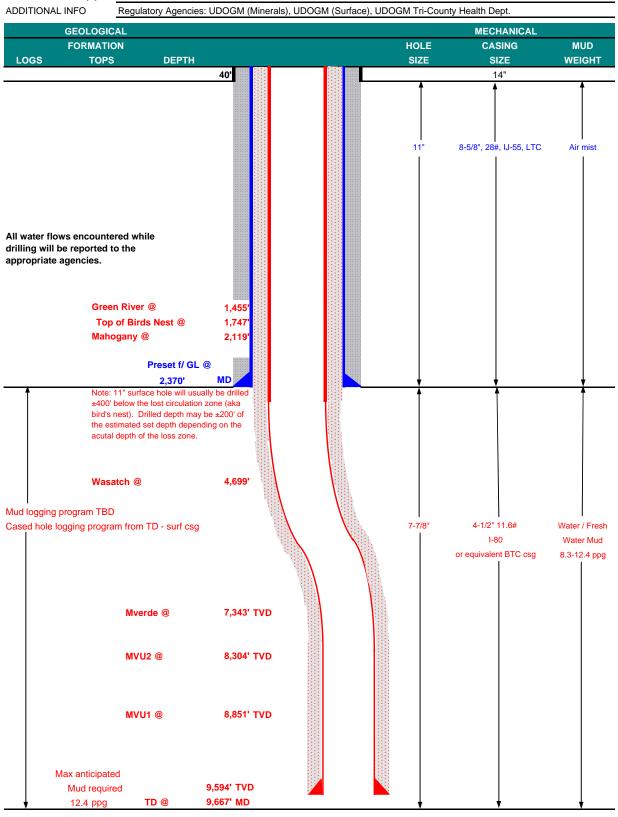
10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM







KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

									DESIGN FACT	ORS
	SIZE	INT	ERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	C)-40'							
								3,390	1,880	348,000
SURFACE	8-5/8"	0	to	2,370	28.00	IJ-55	LTC	0.83	1.69	5.19
								7,780	6,350	278,000
PRODUCTION	4-1/2"	0	to	9,667	11.60	I-80	BTC	1.91	1.03	2.84

*Burst on suface casing is controlled by fracture gradient as shoe with gas gradient above.

D.F. = 2.27

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))
- 2) MASP (Prod Casing) = Pore Pressure at TD (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 12.4 ppg) 0.22 psi/ft = gradient for partially evac wellbore (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 3,966 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD = 12.4 ppg) 0.63 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MABHP 6,077 psi

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE TAIL	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1		+ 0.25 pps flocele				
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
		+ 2% CaCl + 0.25 pps flocele				
SURFACE		NOTE: If well will circulate water to sur	face, optio	n 2 will be ເ	ıtilized	
Option 2 LEAD	1,870'	65/35 Poz + 6% Gel + 10 pps gilsonite	170	35%	11.00	3.82
		+ 0.25 pps Flocele + 3% salt BWOW				
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
		+ 0.25 pps flocele				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION LEAD	4,197'	Premium Lite II +0.25 pps	300	10%	11.00	3.38
		celloflake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
TAIL	5,470'	50/50 Poz/G + 10% salt + 2% gel	1,050	10%	14.30	1.31
		+ 0.1% R-3				

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION

Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

 $\begin{tabular}{ll} \textbf{Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out. } \end{tabular}$

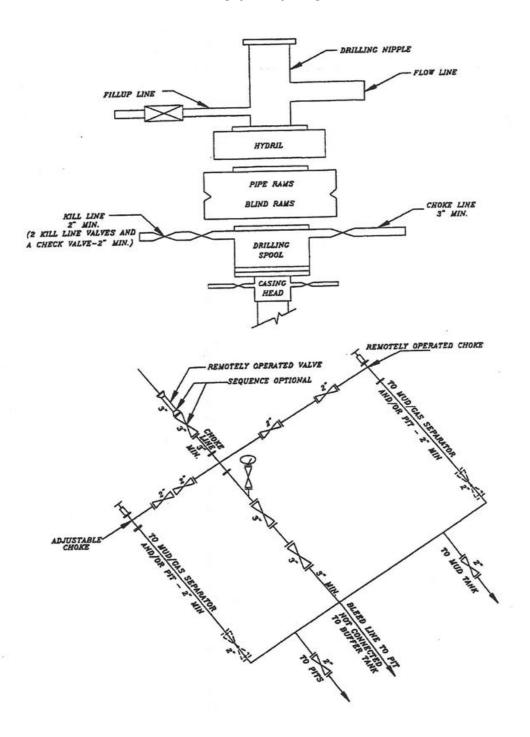
BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.
Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

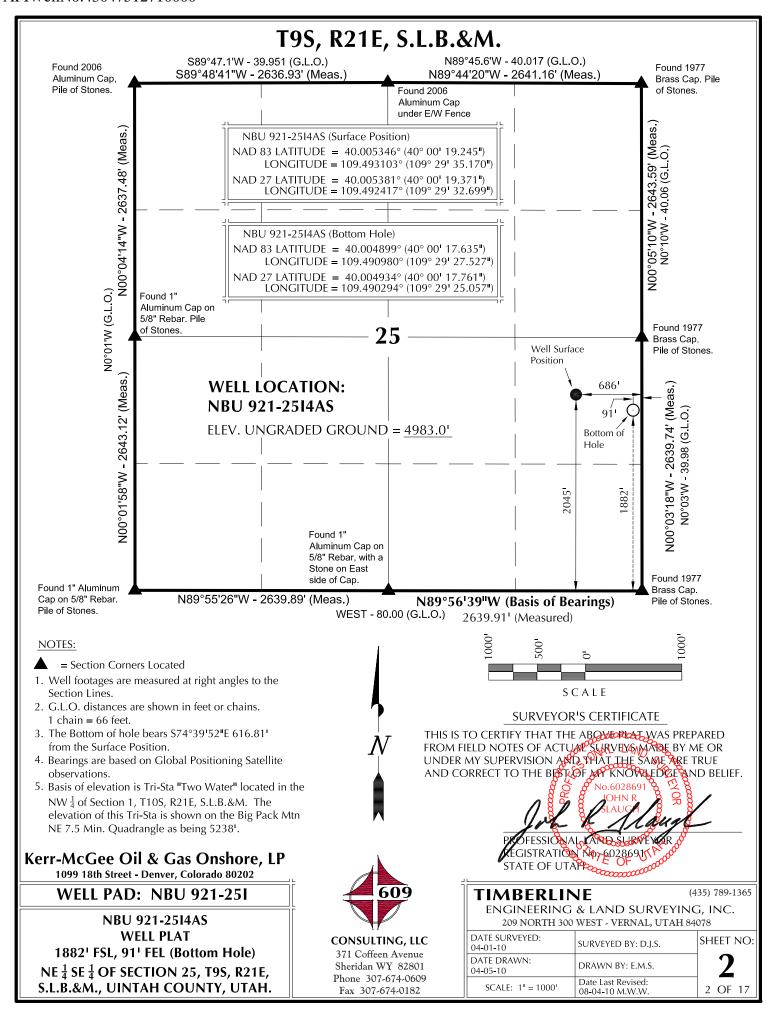
DRILLING ENGINEER:		DATE:	
	John Huycke / Emile Goodwin		
DRILLING SUPERINTENDENT:		DATE:	
	John Merkel / Lovel Young		

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

EXHIBIT A NBU 921-25I4AS



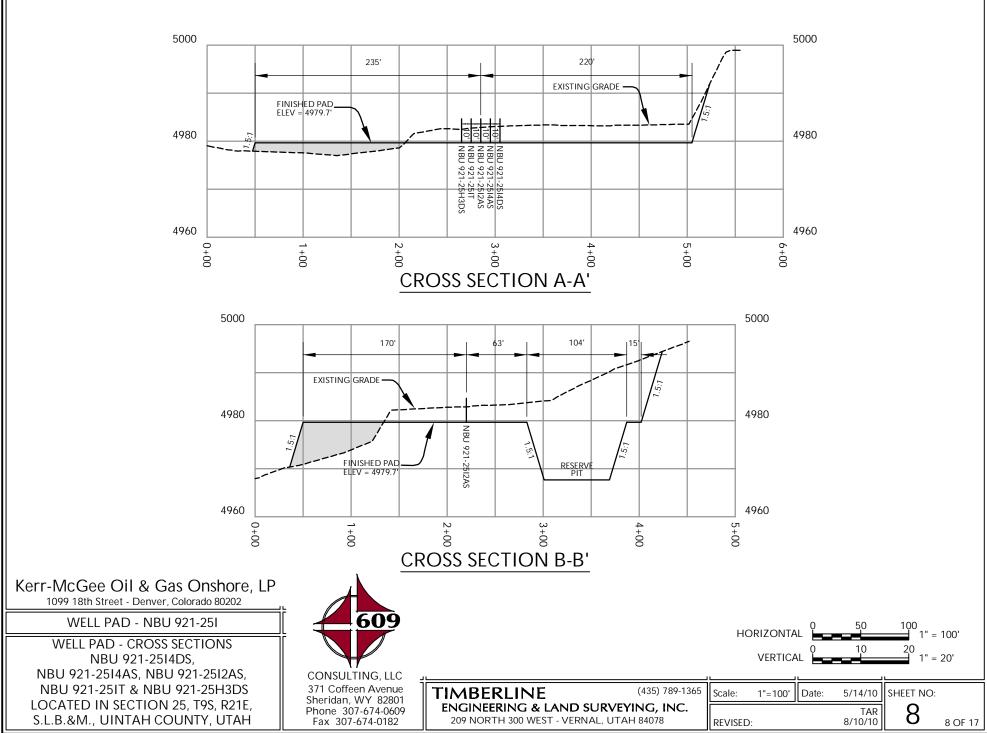
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK



WELL NAME	SURFACE POSITION							BOTTOM HOLE				
		D83		NAD27	.D.E. =0.0			D83	NAI			
NBU	LATITUDE 40°00'19.147"	LONGITU 109°29'35.				TAGES 5' FSL	LATITUDE 40°00'13.071	LONGITUDE			FOOTAGES 1420' FSL	
921-2514DS	40.005319°	109.493097	7° 40.00535	4° 109.49241		· FEL	40.003631°	109.491028°	40.003666°	109.490341°	105¹ FEL	
NBU 921-2514AS	40°00'19.245"	1.03 23 33.				5' FSL	40°00'17.635			109°29'25.057"		
921-2514A5 NBU	40.005346° 40°00'19.343"	109.493103 109°29'35.				o' FEL 4' FSL	40.004899° 40°00'23.203	109.490980° 109°29'38.238	40.004934° 3" 40°00'23.329"	109.490294° 109°29'35.768"	91' FEL 2445' FSL	
921-2512AS	40.005373°	109.493108	8° 40.00540	8° 109.49242		FEL	40.006445°	109.493955°	40.006480°	109.493269°	924' FEL	
NBU 921-25IT	40°00'19.441" 40.005400°	.03 =3 33.				4' FSL ' FEL						
NBU	40°00'19.538"	109.49311 ² 109°29'35				4' FSL	40°00'27.613	109°29'37.554	" 40°00'27.739"	109°29'35.083"	2395' FNL	
921-25H3DS	40.005427°	109.493120) FEL	40.007670°	109.493765°	40.007705°	109.493079°	870' FEL	
CIGE 98D	40°00'18.587" 40.005163°	109°29'34. 109.493010				B' FSL I' FEL						
	101000100	1103.133010		IVE COORDINA			Position to Bo	tom Hole				
WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL	NAME NO	RTH EAST	WELL NAM	1E NORTH	EAST	
NBU 921-2514DS	-615.2'	579.6'	NBU 921-2514AS	-163.1'	594.8'	NBU 921-25	39	0.8' -237.1	NBU 921-25H3D	817.4	-180.5	
N N	OF S.L.	THE SE $\frac{1}{4}$ O	RINGS IS THE	SOUTH LINE	Az=347.54800 AZ=347.54800 N12°27'07"W - 837.11'			ans Az. to E	ist. W.H.=162 W.H.=161.3347 W.H.=160. kist. W.H.=158	25194° 101.1'		
		OBAL POSI	ICH IS TAKEN TIONING SAT NS TO BEAR N	FROM ELLITE	10, 10, 10, 10,	NBI NB NB NB	J 921-25H U 921-25I SU 921-25I BU 921-25 BU 921-25	Az. to Exist. 2AS Az. to E 14AS Az. to E 14DS Az. to	xist. W.H.=162.3347 W.H.=161.3347 xist. W.H.=160. xist. W.H.=158 Exist. W.H.=156	18000° 81.4′ .65694° 71.6′ 5.73861° 61.8′		
	OB:	OBAL POSI	ICH IS TAKEN TIONING SAT NS TO BEAR N	FROM ELLITE \langle 89°56'39"W.	101 101 101 101 101	N N N N N N N N N N N N N N N N N N N	921-25 BU 921-25 BU 921-25	Az. to Exist. 2AS Az. to Exist. 14AS Az. to Exist. 14DS Az. to Exist. 15 Az. to Exist. 16 Az. to Exist. 16 Az. to Exist. 17 Az. to Exist. 18 Az. to	xist. W.H.=156 Exist. W.H.=156	18000° 81.4′ .65694° 71.6′ 5.73861° 61.8′ 3.73861° 61.8′ 3.73861° 61.8′ 3.73861° 61.8′ 8.73861° 61.8′ 6.73861° 61.8′ 6	.6° .81'	

K: VANADARKO V 2010 34 NBU FOCUS SEC 921-25 NDWGS NNBU 921





'APIWellNo:43047512710000'

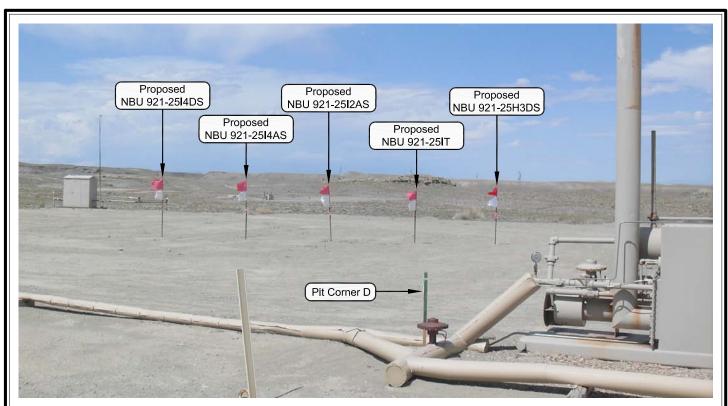


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE





PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: EASTERLY

Kerr-McGee Oil & Gas Onshore, LP

1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 921-251

LOCATION PHOTOS
NBU 921-2514DS,
NBU 921-2514AS, NBU 921-2512AS,
NBU 921-25IT & NBU 921-25H3DS
LOCATED IN SECTION 25, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC

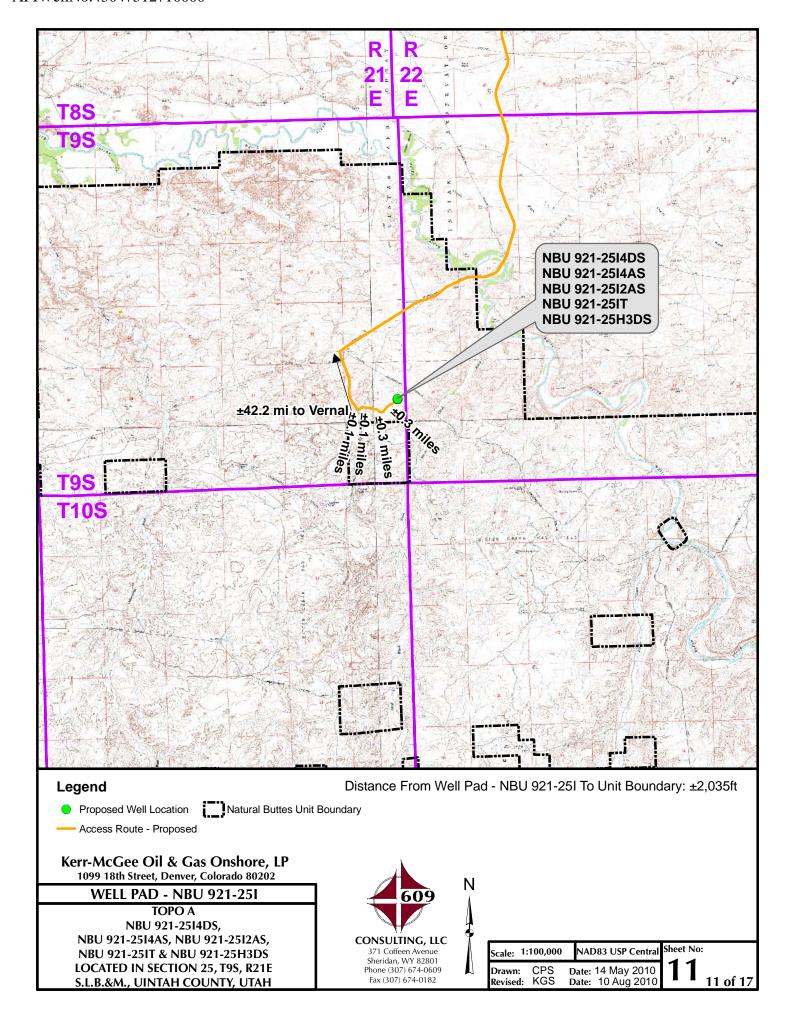
371 Coffeen Avenue Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

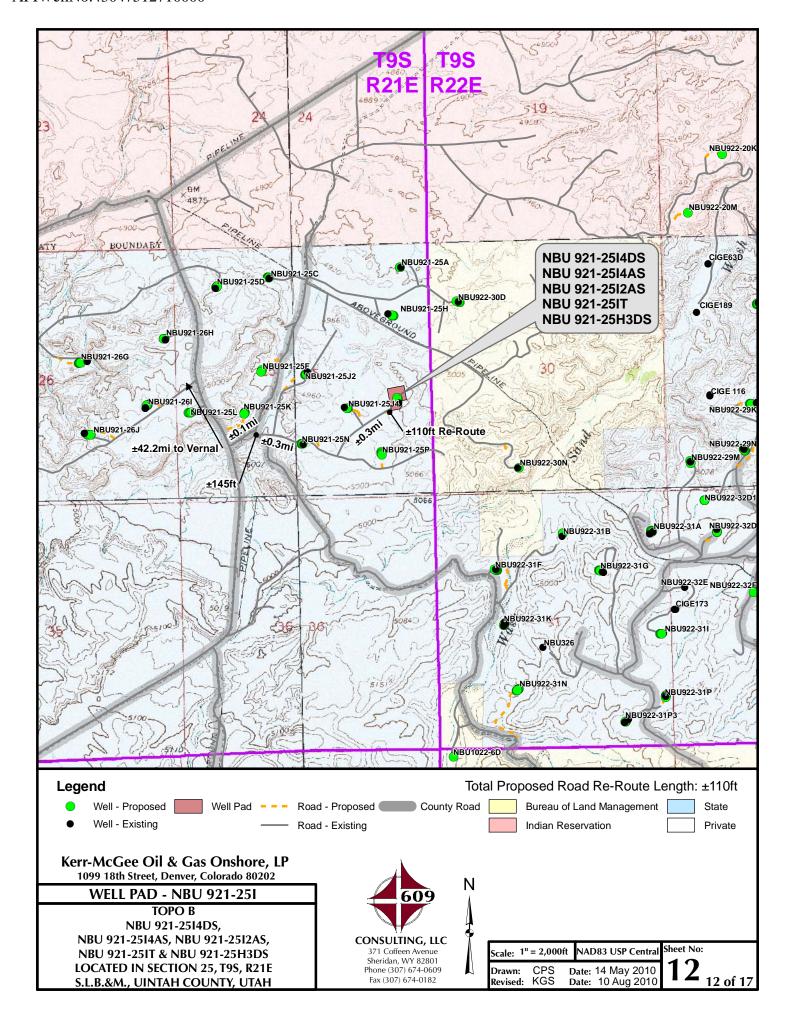
TIMBERLINE

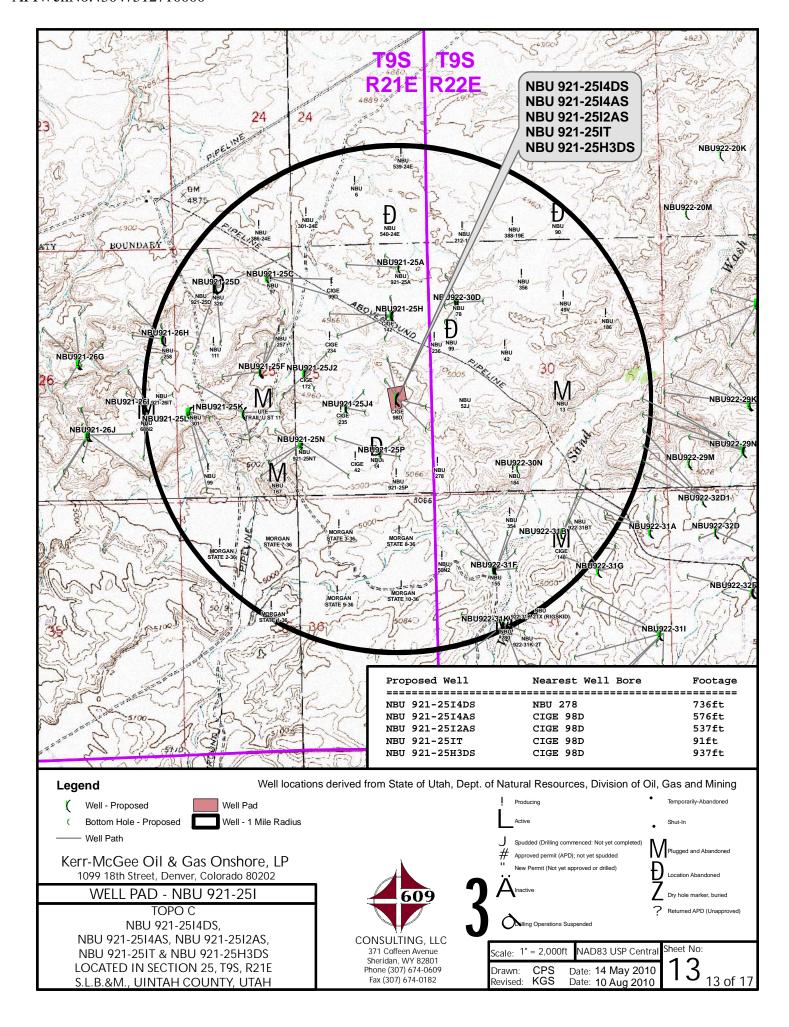
(435) 789-1365

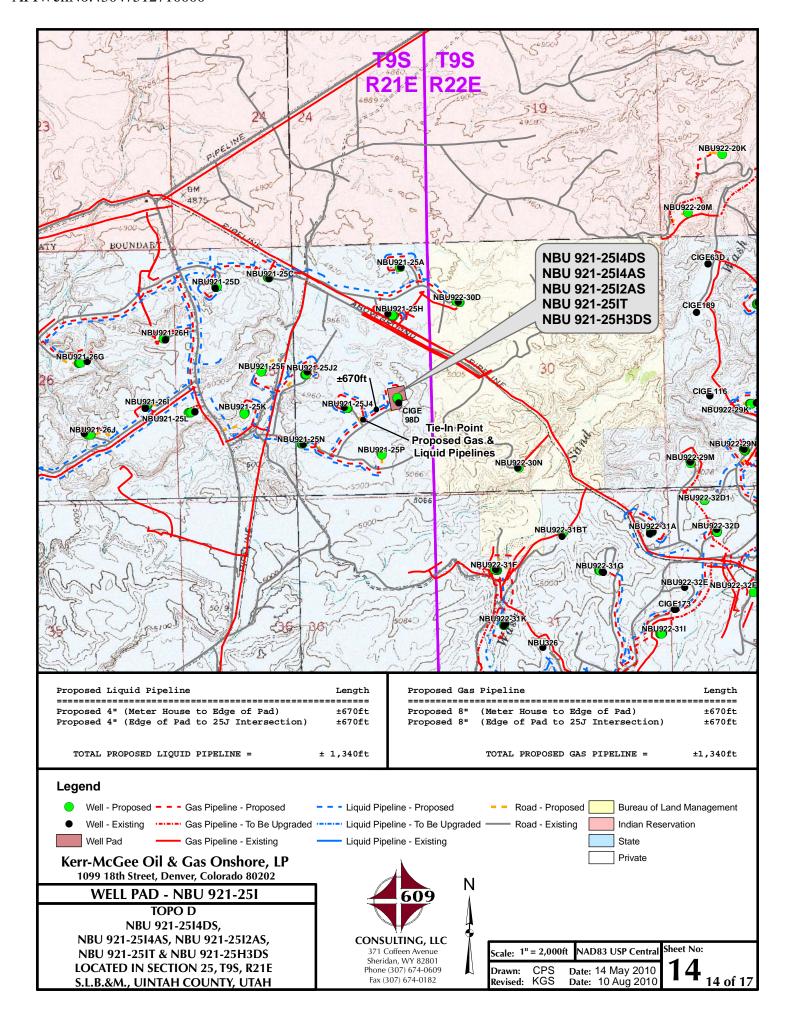
ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078

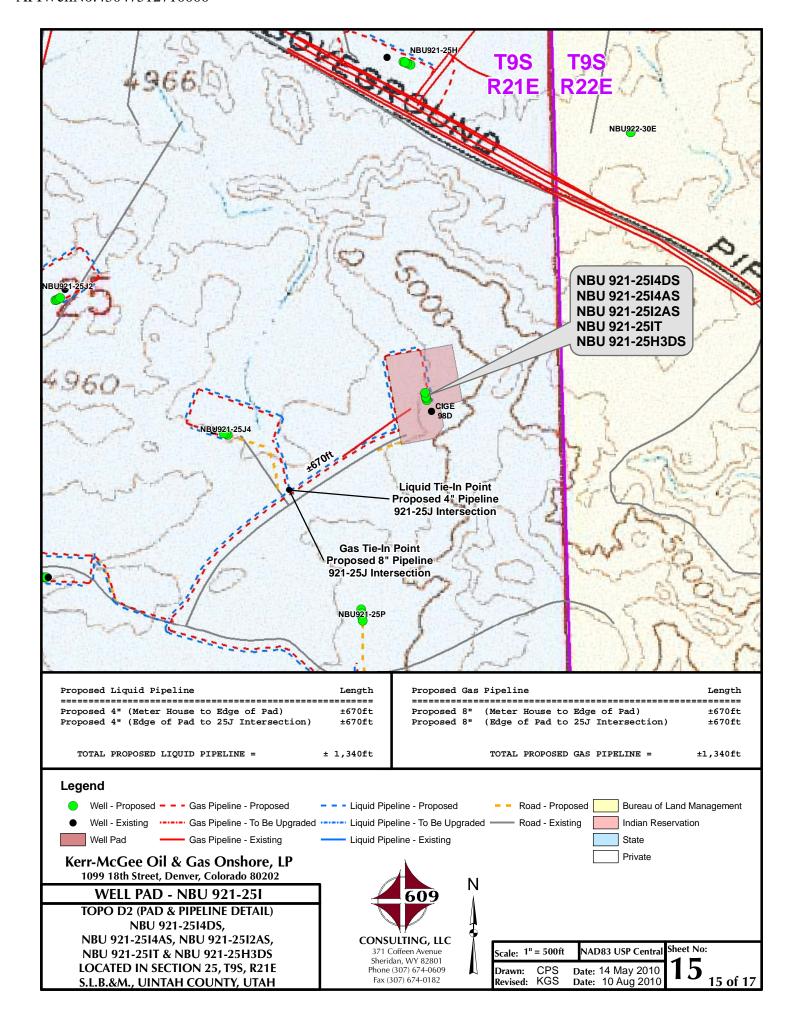
DATE PHOTOS TAKEN: 04-01-10	PHOTOS TAKEN BY: D.J.S.	SHEET NO:
DATE DRAWN: 04-05-10	DRAWN BY: E.M.S.	10
Date Last Revised: 08-04-1	0 M.W.W.	10 OF 17

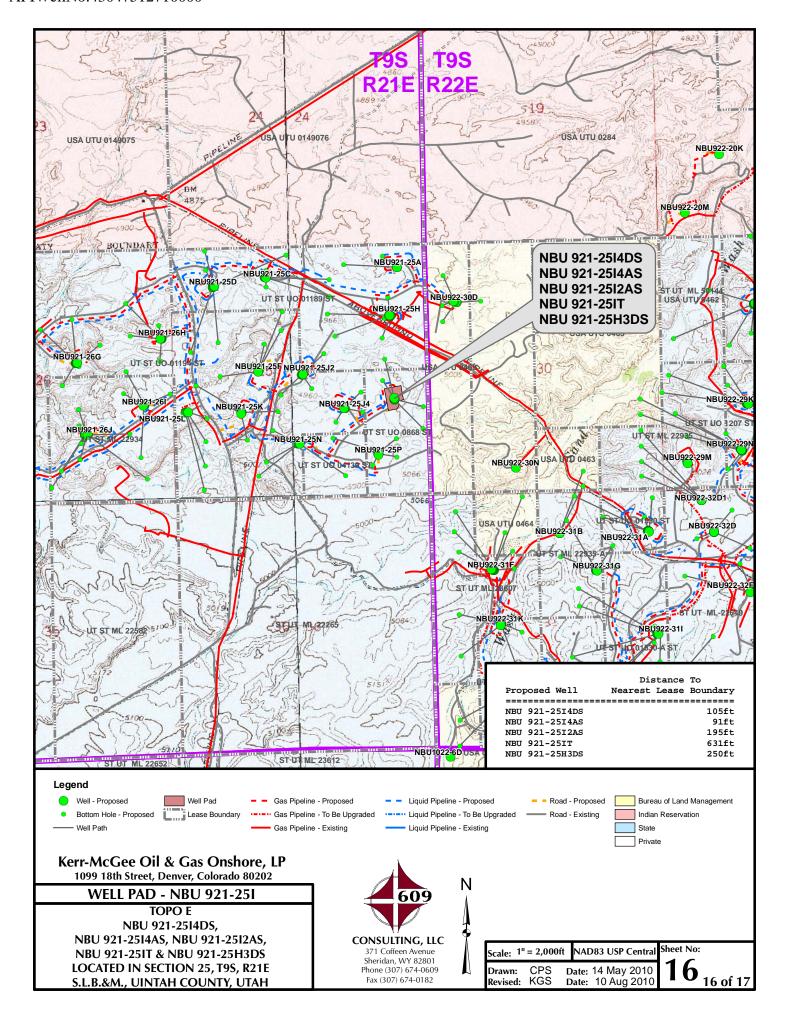








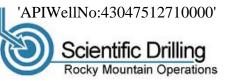




Kerr-McGee Oil & Gas Onshore, LP WELL PAD – NBU 921-25I WELLS – NBU 921-25I4DS, NBU 921-25I4AS, NBU 921-25I2AS, NBU 921-25IT & NBU 921-25H3DS Section 25, T9S, R21E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah proceed in an easterly then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 18.7 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along the Class D County Road approximately 0.1 miles to a second Class D County Road to the southeast. Exit right and proceed in a southeasterly direction along the second Class D County Road approximately 145 feet to a service road to the east. Exit left and proceed in an easterly then southeasterly direction along service road approximately 0.3 miles to a second service road approximately 0.3 miles to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 42.9 miles in a southerly direction.

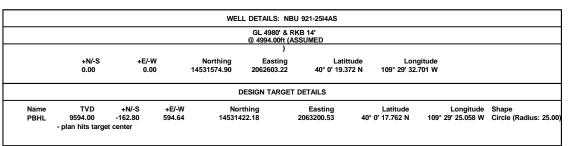


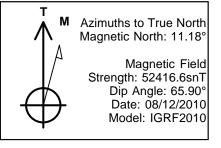
Project: Uintah County, UT UTM12

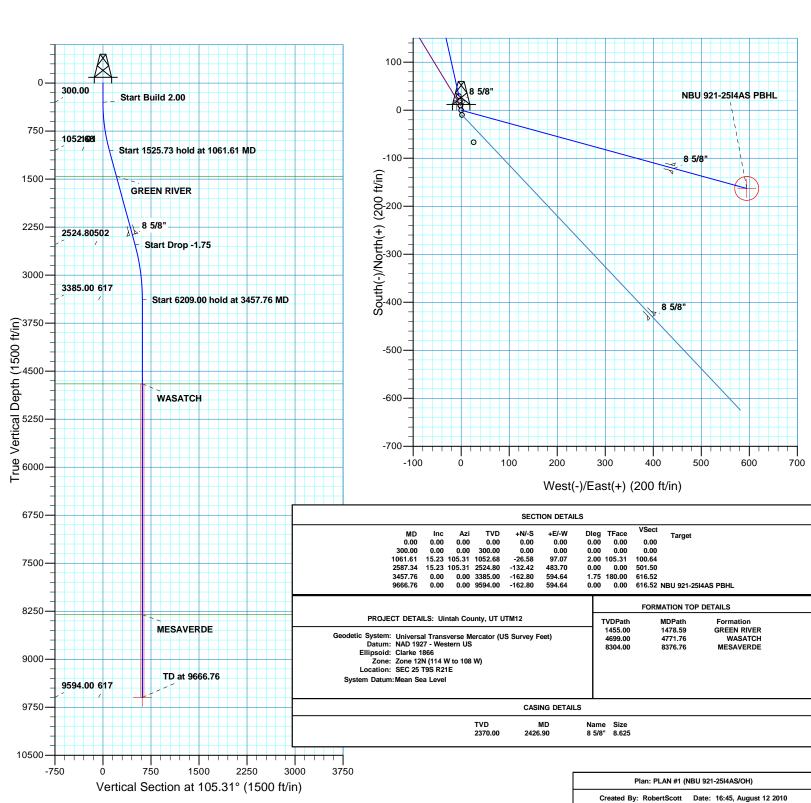
Site: NBU 921-25I Pad Well: NBU 921-25I4AS

Wellbore: OH
Design: PLAN #1











Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 921-25I Pad NBU 921-25I4AS

OH

Plan: PLAN #1

Standard Planning Report

12 August, 2010





SDI Planning Report



109° 29' 32.701 W

Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-25I4AS GL 4980' & RKB 14'

@ 4994.00ft (ASSUMED

Project: Uintah County, UT UTM12 MD Reference:

GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

North Reference: True

Survey Calculation Method:

Minimum Curvature

Mean Sea Level

Well: Wellbore:

Company:

Site:

Design:

Site

OH PLAN #1

Project Uintah County, UT UTM12

Map System: Universal Transverse Mercator (US Survey Feet)

NBU 921-25I Pad

NBU 921-25I4AS

System Datum:

NAD 1927 - Western US

Geo Datum: Map Zone: Zone 12N (114 W to 108 W)

NBU 921-25I Pad, SEC 25 T9S R21E

14,531,604.32 usft Site Position: Northing: Latitude: 40° 0' 19.663 N From: Lat/Long Easting: 2,062,597.96 usft Longitude: 109° 29' 32.762 W

Position Uncertainty: 0.00 ft Slot Radius: 13.200 in **Grid Convergence:** 0.97

NBU 921-25I4AS, 2064' FSL 689' FEL Well

Well Position -29.50 ft 14,531,574.90 usft Latitude: 40° 0' 19.372 N +N/-S Northing:

4.76 ft 2,062,603.22 usft +E/-W Easting: Longitude:

0.00 ft 4,980.00 ft **Position Uncertainty** Wellhead Elevation: **Ground Level:**

Wellbore ОН Sample Date Declination Dip Angle Field Strength Magnetics **Model Name** (°) (°) (nT) IGRF2010 08/12/2010 65.90 11.18 52,417

Design PLAN #1 **Audit Notes:** PLAN Tie On Depth: 0.00 Version: Phase: **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 105.31

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,061.61	15.23	105.31	1,052.68	-26.58	97.07	2.00	2.00	0.00	105.31	
2,587.34	15.23	105.31	2,524.80	-132.42	483.70	0.00	0.00	0.00	0.00	
3,457.76	0.00	0.00	3,385.00	-162.80	594.64	1.75	-1.75	0.00	180.00	
9,666.76	0.00	0.00	9,594.00	-162.80	594.64	0.00	0.00	0.00	0.00	NBU 921-25I4AS PBI



Project:

SDI Planning Report



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

Well NBU 921-25I4AS GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

GL 4980' & RKB 14'

@ 4994.00ft (ASSUMED

North Reference:

Survey Calculation Method:

True

Minimum Curvature

NBU 921-25I Pad Site:

NBU 921-25I4AS Well:

Wellbore: ОН PLAN #1 Design:

ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0		0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.0		0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.0	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Buil	ld 2.00								
400.0	0 2.00	105.31	399.98	-0.46	1.68	1.75	2.00	2.00	0.00
500.0	0 4.00	105.31	499.84	-1.84	6.73	6.98	2.00	2.00	0.00
600.0		105.31	599.45	-4.14	15.14	15.69	2.00	2.00	0.00
700.0		105.31	698.70	-7.36	26.89	27.88	2.00	2.00	0.00
800.0		105.31	797.47	-11.49	41.98	43.52	2.00	2.00	0.00
900.0		105.31	895.62	-16.53	60.38	62.60	2.00	2.00	0.00
1,000.0		105.31	993.06	-22.47	82.08	85.10	2.00	2.00	0.00
1,061.6		105.31	1,052.68	-26.58	97.07	100.64	2.00	2.00	0.00
	5.73 hold at 1061.61		4 000 74	00.04	400.00	440.70	0.00	0.00	0.00
1,100.0		105.31	1,089.71	-29.24	106.80	110.73	0.00	0.00	0.00
1,200.0		105.31	1,186.20	-36.18	132.14	137.00	0.00	0.00	0.00
1,300.0	0 15.23	105.31	1,282.69	-43.11	157.48	163.28	0.00	0.00	0.00
1,400.0		105.31	1,379.17	-50.05	182.82	189.55	0.00	0.00	0.00
1,478.5	9 15.23	105.31	1,455.00	-55.50	202.74	210.20	0.00	0.00	0.00
GREEN R	RIVER								
1,500.0	0 15.23	105.31	1,475.66	-56.99	208.16	215.82	0.00	0.00	0.00
1,600.0	0 15.23	105.31	1,572.15	-63.93	233.50	242.10	0.00	0.00	0.00
1,700.0	0 15.23	105.31	1,668.63	-70.86	258.84	268.37	0.00	0.00	0.00
1,800.0	0 15.23	105.31	1,765.12	-77.80	284.19	294.64	0.00	0.00	0.00
1,900.0		105.31	1,861.61	-84.74	309.53	320.92	0.00	0.00	0.00
2,000.0		105.31	1,958.09	-91.68	334.87	347.19	0.00	0.00	0.00
2,100.0		105.31	2,054.58	-98.61	360.21	373.46	0.00	0.00	0.00
2,200.0		105.31	2,151.07	-105.55	385.55	399.74	0.00	0.00	0.00
2,300.0		105.31	2,247.55	-112.49	410.89	426.01	0.00	0.00	0.00
2,400.0		105.31	2,344.04	-112.49	436.23	452.28	0.00	0.00	0.00
2,426.9		105.31	2,370.00	-119.43	443.05	459.35	0.00	0.00	0.00
8 5/8"	10.20	100.01	2,070.00	121.20	440.00	400.00	0.00	0.00	0.00
2,500.0	0 15.23	105.31	2,440.53	-126.36	461.57	478.56	0.00	0.00	0.00
2,587.3		105.31	2,524.80	-132.42	483.70	501.50	0.00	0.00	0.00
Start Dro		. 00.01	2,021.00	. 32. 12	.00.70	231.00	0.00	0.00	0.00
	•	40= 04	0.507.00	400.00	400.00	501.01			2.22
2,600.0		105.31	2,537.02	-133.30	486.89	504.81	1.75	-1.75	0.00
2,700.0		105.31	2,633.99	-139.74	510.44	529.23 550.67	1.75	-1.75 1.75	0.00
2,800.0 2,900.0		105.31 105.31	2,731.66 2,829.94	-145.41 -150.28	531.13 548.93	550.67 569.13	1.75 1.75	-1.75 1.75	0.00 0.00
2,900.0 3,000.0		105.31	2,829.94 2,928.73	-150.28 -154.36	548.93 563.83	584.58	1.75 1.75	-1.75 -1.75	0.00
3,100.0		105.31	3,027.95	-157.64	575.81	597.00	1.75	-1.75	0.00
3,200.0		105.31	3,127.51	-160.12	584.86	606.38	1.75	-1.75	0.00
3,300.0		105.31	3,227.30	-161.79	590.98	612.72	1.75	-1.75	0.00
3,400.0		105.31	3,327.25	-162.66	594.15	616.02	1.75	-1.75	0.00
3,457.7		0.00	3,385.00	-162.80	594.64	616.52	1.75	-1.75	0.00
Start 620	9.00 hold at 3457.76	6 MD							
3,500.0	0.00	0.00	3,427.24	-162.80	594.64	616.52	0.00	0.00	0.00
3,600.0		0.00	3,527.24	-162.80	594.64	616.52	0.00	0.00	0.00
3,700.0		0.00	3,627.24	-162.80	594.64	616.52	0.00	0.00	0.00
3,800.0	0.00	0.00	3,727.24	-162.80	594.64	616.52	0.00	0.00	0.00



Project:

Site:

Design:

SDI Planning Report



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

NBU 921-25I Pad

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-25I4AS GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

MD Reference:

GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

North Reference:

Minimum Curvature **Survey Calculation Method:**

True

NBU 921-25I4AS Well: Wellbore: ОН PLAN #1

Measured Depth Inclination (Part Part Par	Design.	1 12/11/17/1								
Depth Inclination Azimuth Crit Cri	Planned Survey									
4,000.00 4,0	Depth	Inclination		Depth			Section	Rate	Rate	Rate
4.100.00	3,900	0.00	0.00	3,827.24	-162.80	594.64	616.52	0.00	0.00	0.00
4,600.00 0,00 0,00 4,527.24 162.80 594.64 616.52 0,00 0,00 0,00 4,771.76 0,00 0,00 4,699.00 162.80 594.64 616.52 0,00 0,00 0,00 0,00 4,771.76 0,00 0,00 4,699.00 162.80 594.64 616.52 0,00 0,00 0,00 0,00 4,771.76 0,00 0,00 4,699.00 162.80 594.64 616.52 0,00 0,00 0,00 0,00 4,909.00 1,602.80 594.64 616.52 0,00 0,00 0,00 0,00 4,907.24 162.80 594.64 616.52 0,00 0,00 0,00 0,00 5,000 0,00 0,00 4,907.24 162.80 594.64 616.52 0,00 0,00 0,00 0,00 5,000 0,00 0,00 1,907.24 162.80 594.64 616.52 0,00 0,00 0,00 0,00 5,000 0,00 0,00 5,000 0,00 0,00 5,000 0,00 0,00 5,000 0,00 0,00 0,00 5,000 0,00 0	4,100 4,200 4,300	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00	4,027.24 4,127.24 4,227.24	-162.80 -162.80 -162.80	594.64 594.64 594.64	616.52 616.52 616.52	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
4,800.00 0.00 0.00 4,727.24 -162.80 594.64 616.52 0.00 0.00 0.00 5.000 0.00 0.00 4,827.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 5.000 0.00 0.00	4,600 4,700 4,771	0.00 0.00 0.00 0.00 1.76 0.00	0.00 0.00	4,527.24 4,627.24	-162.80 -162.80	594.64 594.64	616.52 616.52	0.00 0.00	0.00 0.00	0.00 0.00
4,900.00 0.00 0.00 4,827.24 -162.80 594.64 616.52 0.00 0.00 0.00 5.000.00 0.00 4,927.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 5.000.00 5.000.00 0.00 5.000.00 5.000.00 0.00 5.000.00 0.00 5.000.00 0.00 0.00 5.200.00 0.00			0.00	4.727.24	-162.80	594.64	616.52	0.00	0.00	0.00
5,400.00 0.00 0.00 5,327.24 -162.80 594.64 616.52 0.00 0.00 0.00 5,500.00 0.00 0.00 5,427.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 5,600.00 0.00 0.00 5,700.00 0.00 0.00 5,700.00 0.00 0.00 5,700.00 0.00 0.00 5,700.00 0.00 0.00 5,700.00 0.00 0.00 5,700.00 0.00 0.00 5,700.00 0.00 0.00 0.00 5,800.00 0.00 0.00 5,800.00 0.00 0.00 5,800.00 0.00 0.00 5,800.00 0.00 0.00 5,827.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 5,800.00 0.00 0.00 5,827.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 6,000.00 0.00 0.00	4,900 5,000 5,100 5,200	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	4,827.24 4,927.24 5,027.24 5,127.24	-162.80 -162.80 -162.80 -162.80	594.64 594.64 594.64 594.64	616.52 616.52 616.52 616.52	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
5.500.00 0.00 0.00 5.427.24 -162.80 594.64 616.52 0.00 0.00 0.00 5.600.00 0.00 5.600.00 0.00	,									
6,000,00 0,00 0,00 5,927,24 -162,80 594,64 616,52 0,00 0,00 0,00 6,000,00 6,000,00 0,00	5,500 5,600 5,700	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00	5,427.24 5,527.24 5,627.24	-162.80 -162.80 -162.80	594.64 594.64 594.64	616.52 616.52 616.52	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
6,100.00 0.00 0.00 6,027.24 -162.80 594.64 616.52 0.00 0.00 0.00 6,200.00 0.00 0.00 6,227.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 6,227.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 6,227.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 6,400.00 0.00 0.00 6,227.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 6,500.00 0.00 0.00 0.00 6,500.00 0.00 0.00 6,600.00 0.00 0.00 6,600.00 0.00	5,900	0.00	0.00		-162.80	594.64				0.00
6,500.00 0.00 0.00 0.00 6,427.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 6,600.00 0.00 0.00	6,100 6,200	0.00 0.00 0.00	0.00 0.00	6,027.24 6,127.24	-162.80 -162.80	594.64 594.64	616.52 616.52	0.00 0.00	0.00 0.00	0.00 0.00
6,800.00 0.00 0.00 6,727.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 6,900.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	6,500	0.00	0.00	6,427.24	-162.80	594.64	616.52	0.00	0.00	0.00
7,000.00	6,800	0.00	0.00	6,727.24	-162.80	594.64	616.52	0.00	0.00	0.00
7,500.00 0.00 0.00 7,427.24 -162.80 594.64 616.52 0.00 0.00 0.00 7,600.00 7,600.00 0.00 7,527.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 7,700.00 0.00 0.00	7,000 7,100 7,200	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00	6,927.24 7,027.24 7,127.24	-162.80 -162.80 -162.80	594.64 594.64 594.64	616.52 616.52 616.52	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
7,900.00 0.00 7,827.24 -162.80 594.64 616.52 0.00 0.00 0.00 8,000.00 0.00 0.00 7,927.24 -162.80 594.64 616.52 0.00 0.00 0.00 8,100.00 0.00 0.00 8,027.24 -162.80 594.64 616.52 0.00 0.00 0.00 8,200.00 0.00 0.00 8,127.24 -162.80 594.64 616.52 0.00 0.00 0.00 8,300.00 0.00 0.00 8,227.24 -162.80 594.64 616.52 0.00 0.00 0.00 8,376.76 0.00 0.00 8,304.00 -162.80 594.64 616.52 0.00 0.00 0.00	7,500 7,600 7,700	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00	7,427.24 7,527.24 7,627.24	-162.80 -162.80 -162.80	594.64 594.64 594.64	616.52 616.52 616.52	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
8,200.00 0.00 0.00 8,127.24 -162.80 594.64 616.52 0.00 0.00 0.00 0.00 8,300.00 0.00 0.00 8,227.24 -162.80 594.64 616.52 0.00 0.00 0.00 8,376.76 0.00 0.00 8,304.00 -162.80 594.64 616.52 0.00 0.00 0.00 MESAVERDE	7,900	0.00	0.00	7,827.24	-162.80	594.64	616.52	0.00	0.00	0.00
MESAVERDE	8,100 8,200	0.00 0.00 0.00	0.00 0.00	8,027.24 8,127.24	-162.80 -162.80	594.64	616.52 616.52	0.00 0.00	0.00	0.00
O MUNICIPAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO	MESAV	/ERDE		8,304.00 8,327.24	-162.80 -162.80	594.64 594.64	616.52 616.52	0.00	0.00	0.00



SDI Planning Report



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

Well NBU 921-25I4AS GL 4980' & RKB 14'

@ 4994.00ft (ASSUMED

GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

True

North Reference:

Survey Calculation Method:

Minimum Curvature

Well:

Company:

Project:

NBU 921-25I Pad Site: NBU 921-25I4AS

Wellbore: ОН PLAN #1 Design:

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,500.00	0.00	0.00	8,427.24	-162.80	594.64	616.52	0.00	0.00	0.00
8,600.00	0.00	0.00	8,527.24	-162.80	594.64	616.52	0.00	0.00	0.00
8,700.00	0.00	0.00	8,627.24	-162.80	594.64	616.52	0.00	0.00	0.00
8,800.00	0.00	0.00	8,727.24	-162.80	594.64	616.52	0.00	0.00	0.00
8,900.00	0.00	0.00	8,827.24	-162.80	594.64	616.52	0.00	0.00	0.00
9,000.00	0.00	0.00	8,927.24	-162.80	594.64	616.52	0.00	0.00	0.00
9,100.00	0.00	0.00	9,027.24	-162.80	594.64	616.52	0.00	0.00	0.00
9,200.00	0.00	0.00	9,127.24	-162.80	594.64	616.52	0.00	0.00	0.00
9,300.00	0.00	0.00	9,227.24	-162.80	594.64	616.52	0.00	0.00	0.00
9,400.00	0.00	0.00	9,327.24	-162.80	594.64	616.52	0.00	0.00	0.00
9,500.00	0.00	0.00	9,427.24	-162.80	594.64	616.52	0.00	0.00	0.00
9,600.00	0.00	0.00	9,527.24	-162.80	594.64	616.52	0.00	0.00	0.00
9,666.76	0.00	0.00	9,594.00	-162.80	594.64	616.52	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
NBU 921-25I4AS PBHL - plan hits target cent - Circle (radius 25.00		0.00	9,594.00	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058 W

Casing Points					
	Measured	Vertical		Casing	Hole
	Depth (ft)	Depth (ft)	Name	Diameter (in)	Diameter (in)
	(14)	(1.1)	Name	()	()
	2,426.90	2,370.00 8	/8"	8.625	11.000

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	1,478.59	1,455.00	GREEN RIVER				
	4,771.76	4,699.00	WASATCH				
	8,376.76	8,304.00	MESAVERDE				



SDI Planning Report



Database: EDM5000-RobertS-Local

> ОН PLAN #1

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

NBU 921-25I Pad

NBU 921-25I4AS

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-25I4AS GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

MD Reference:

GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

True

North Reference:

Survey Calculation Method:

Minimum Curvature

Company:

Project:

Site:

Well:

Wellbore:

Design:

Plan Annotatio	ns				
	Measured	Vertical	Local Coord	dinates	
	Depth	Depth	+N/-S	+E/-W	
	(ft)	(ft)	(ft)	(ft)	Comment
	300.00	300.00	0.00	0.00	Start Build 2.00
	1,061.61	1,052.68	-26.58	97.07	Start 1525.73 hold at 1061.61 MD
	2,587.34	2,524.80	-132.42	483.70	Start Drop -1.75
	3,457.76	3,385.00	-162.80	594.64	Start 6209.00 hold at 3457.76 MD
	9,666.76	9,594.00	-162.80	594.64	TD at 9666.76



Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 921-25I Pad NBU 921-25I4AS

OH

Plan: PLAN #1

Standard Planning Report - Geographic

12 August, 2010





SDI Planning Report - Geographic



109° 29' 32.701 W

Database: EDM5000-RobertS-Local

> OH PLAN #1

Kerr McGee Oil and Gas Onshore LP

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-25I4AS GL 4980' & RKB 14'

@ 4994.00ft (ASSUMED

GL 4980' & RKB 14'

@ 4994.00ft (ASSUMED

MD Reference:

North Reference: True

Survey Calculation Method:

Minimum Curvature

Design: Project

Wellbore:

Company:

Project:

Site:

Well:

Uintah County, UT UTM12

NBU 921-25I Pad

NBU 921-25I4AS

Uintah County, UT UTM12

Map System: Geo Datum:

Universal Transverse Mercator (US Survey Feet)

NAD 1927 - Western US Zone 12N (114 W to 108 W) System Datum:

Mean Sea Level

Map Zone:

Site NBU 921-25I Pad, SEC 25 T9S R21E

Northing: 14,531,604.32 usft 40° 0' 19.663 N Site Position: Latitude:

2,062,597.96 usft Longitude: 109° 29' 32.762 W From: Lat/Long Easting:

Grid Convergence: 0.00 ft 0.97 **Position Uncertainty:** Slot Radius: 13.200 in

Well NBU 921-25I4AS, 2064' FSL 689' FEL

Well Position +N/-S 0.00 ft Northing: 14,531,574.90 usft Latitude: 40° 0' 19.372 N

+E/-W 0.00 ft Easting: 2,062,603.22 usft Longitude:

Position Uncertainty 0.00 ft Wellhead Elevation: **Ground Level:** 4.980.00 ft

Wellbore OH

Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) IGRF2010 08/12/2010 11.18 65.90 52,417

PLAN #1 Design **Audit Notes:**

PLAN Tie On Depth: 0.00 Version: Phase: Depth From (TVD) +N/-S **Vertical Section:** +E/-W Direction

(ft) (ft) (ft) (°) 0.00 0.00 0.00 105.31

Plan Sections Vertical Build Measured Dogleg Turn Depth Inclination Azimuth Depth +N/-S +E/-W Rate Rate Rate TFO (°/100ft) (°/100ft) (°/100ft) (ft) (°) (°) (ft) (ft) (ft) **Target** (°) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 300.00 0.00 0.00 300.00 0.00 0.00 0.00 0.00 0.00 0.00 -26.58 97.07 0.00 105.31 1,061.61 15.23 105.31 1,052.68 2.00 2.00 0.00 2,587.34 15.23 105.31 2,524.80 -132.42483.70 0.00 0.00 0.00 -162.80 0.00 3,457.76 0.00 0.00 3,385.00 594.64 1.75 -1.75180.00 9,666.76 0.00 0.00 9,594.00 -162.80 594.64 0.00 0.00 0.00 0.00 NBU 921-25I4AS PBI



SDI Planning Report - Geographic

MD Reference:



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference:

Well NBU 921-25I4AS GL 4980' & RKB 14'

@ 4994.00ft (ASSUMED

True

GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

North Reference:

Minimum Curvature

Project: Uintah County, UT UTM12

NBU 921-25I Pad Site: NBU 921-25I4AS Well:

Wellbore: ОН PLAN #1 Design:

			1 # 1							
Plann	ed Survey									
M	leasured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
	0.00	0.00	0.00	0.00	0.00	0.00	14,531,574.90	2,062,603.22	40° 0' 19.372 N	109° 29' 32.701 W
	100.00	0.00	0.00	100.00	0.00	0.00	14,531,574.90	2,062,603.22	40° 0' 19.372 N	109° 29' 32.701 W
	200.00	0.00	0.00	200.00	0.00	0.00	14,531,574.90	2,062,603.22	40° 0' 19.372 N	109° 29' 32.701 W
	300.00	0.00	0.00	300.00	0.00	0.00	14,531,574.90	2,062,603.22	40° 0' 19.372 N	109° 29' 32.701 W
	Start Bui	ld 2.00								
	400.00	2.00	105.31	399.98	-0.46	1.68	14,531,574.47	2,062,604.91	40° 0' 19.367 N	109° 29' 32.680 W
	500.00	4.00	105.31	499.84	-1.84	6.73	14,531,573.17	2,062,609.98	40° 0' 19.353 N	109° 29' 32.615 W
	600.00	6.00	105.31	599.45	-4.14	15.14	14,531,571.01	2,062,618.42	40° 0' 19.331 N	109° 29' 32.507 W
	700.00	8.00	105.31	698.70	-7.36	26.89	14,531,568.00	2,062,630.23	40° 0' 19.299 N	109° 29' 32.356 W
	800.00	10.00	105.31	797.47	-11.49	41.98	14,531,564.12	2,062,645.39	40° 0' 19.258 N	109° 29' 32.162 W
	900.00	12.00	105.31	895.62	-16.53	60.38	14,531,559.39	2,062,663.87	40° 0' 19.208 N	109° 29' 31.925 W
	1,000.00	14.00	105.31	993.06	-22.47	82.08	14,531,553.82	2,062,685.66	40° 0' 19.149 N	109° 29' 31.646 W
	1,061.61	15.23	105.31	1,052.68	-26.58	97.07	14,531,549.97	2,062,700.73	40° 0' 19.109 N	109° 29' 31.454 W
	1,100.00	5.73 hold at 1 15.23	105.31	1,089.71	-29.24	106.80	14,531,547.47	2,062,710.50	40° 0' 19.083 N	109° 29' 31.329 W
	1,200.00	15.23	105.31	1,186.20	-36.18	132.14	14,531,540.97	2,062,710.30	40° 0' 19.014 N	109° 29' 31.003 W
	1,300.00	15.23	105.31	1,282.69	-43.11	157.48	14,531,534.46	2,062,761.41	40° 0' 18.945 N	109° 29' 30.677 W
	1,400.00	15.23	105.31	1,379.17	-50.05	182.82	14,531,527.95	2,062,786.86	40° 0' 18.877 N	109° 29' 30.351 W
	1,478.59	15.23	105.31	1,455.00	-55.50	202.74	14,531,522.84	2,062,806.87	40° 0' 18.823 N	109° 29' 30.095 W
	GREEN F			1,100100			,,.	_,,,		
	1,500.00	15.23	105.31	1,475.66	-56.99	208.16	14,531,521.44	2,062,812.32	40° 0' 18.808 N	109° 29' 30.026 W
	1,600.00	15.23	105.31	1,572.15	-63.93	233.50	14,531,514.93	2,062,837.77	40° 0' 18.740 N	109° 29' 29.700 W
	1,700.00	15.23	105.31	1,668.63	-70.86	258.84	14,531,508.43	2,062,863.22	40° 0' 18.671 N	109° 29' 29.374 W
	1,800.00	15.23	105.31	1,765.12	-77.80	284.19	14,531,501.92	2,062,888.68	40° 0' 18.603 N	109° 29' 29.049 W
	1,900.00	15.23	105.31	1,861.61	-84.74	309.53	14,531,495.41	2,062,914.13	40° 0' 18.534 N	109° 29' 28.723 W
	2,000.00	15.23	105.31	1,958.09	-91.68	334.87	14,531,488.90	2,062,939.59	40° 0' 18.465 N	109° 29' 28.397 W
	2,100.00	15.23	105.31	2,054.58	-98.61	360.21	14,531,482.40	2,062,965.04	40° 0' 18.397 N	109° 29' 28.072 W
	2,200.00	15.23	105.31	2,151.07	-105.55	385.55	14,531,475.89	2,062,990.50	40° 0' 18.328 N	109° 29' 27.746 W
	2,300.00	15.23	105.31	2,247.55	-112.49	410.89	14,531,469.38	2,063,015.95	40° 0' 18.260 N	109° 29' 27.420 W
	2,400.00	15.23	105.31	2,344.04	-119.43	436.23	14,531,462.87	2,063,041.41	40° 0' 18.191 N	109° 29' 27.094 W
	2,426.90	15.23	105.31	2,370.00	-121.29	443.05	14,531,461.12	2,063,048.25	40° 0' 18.173 N	109° 29' 27.007 W
	8 5/8"	45.00	105.01	0.440.50	400.00	101 ==	44 504 450 00	0.000.000.00	100 01 10 100 11	4000 001 00 700 141
	2,500.00	15.23	105.31	2,440.53	-126.36	461.57	14,531,456.36	2,063,066.86	40° 0' 18.123 N	109° 29' 26.769 W
	2,587.34	15.23	105.31	2,524.80	-132.42	483.70	14,531,450.68	2,063,089.09	40° 0' 18.063 N	109° 29' 26.484 W
	Start Dro	•	105.21	2 527 02	122.20	496.90	14 521 440 96	2 062 002 20	40° 0' 10 0E4 N	109° 29' 26.443 W
	2,600.00 2,700.00	15.01 13.26	105.31 105.31	2,537.02 2,633.99	-133.30 -139.74	486.89 510.44	14,531,449.86 14,531,443.81	2,063,092.29 2,063,115.95	40° 0' 18.054 N 40° 0' 17.990 N	109 29 26.443 W
	2,800.00	11.51	105.31	2,731.66	-145.41	531.13	14,531,438.50	2,063,136.73	40° 0' 17.934 N	109° 29' 25.875 W
	2,900.00	9.76	105.31	2,829.94	-150.28	548.93	14,531,433.93	2,063,154.61	40° 0' 17.886 N	109° 29' 25.646 W
	3,000.00	8.01	105.31	2,928.73	-154.36	563.83	14,531,430.10	2,063,169.58	40° 0' 17.846 N	109° 29' 25.454 W
	3,100.00	6.26	105.31	3,027.95	-157.64	575.81	14,531,427.03	2,063,181.61	40° 0' 17.813 N	109° 29' 25.300 W
	3,200.00	4.51	105.31	3,127.51	-160.12	584.86	14,531,424.70	2,063,190.71	40° 0' 17.789 N	109° 29' 25.184 W
	3,300.00	2.76	105.31	3,227.30	-161.79	590.98	14,531,423.13	2,063,196.85	40° 0' 17.772 N	109° 29' 25.106 W
	3,400.00	1.01	105.31	3,327.25	-162.66	594.15	14,531,422.32	2,063,200.04	40° 0' 17.764 N	109° 29' 25.065 W
	3,457.76	0.00	0.00	3,385.00	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058 W
	Start 620	9.00 hold at 3	457.76 MD							
	3,500.00	0.00	0.00	3,427.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058 W
	3,600.00	0.00	0.00	3,527.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058 W
	3,700.00	0.00	0.00	3,627.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058 W
	3,800.00	0.00	0.00	3,727.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058 W



Project:

Site:

Well:

SDI Planning Report - Geographic



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

NBU 921-25I Pad

NBU 921-25I4AS

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

Well NBU 921-25I4AS GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

North Reference:

Survey Calculation Method:

True

Minimum Curvature

Wellbore: ОН PLAN #1 Design:

_									
anned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,900.00	0.00	0.00	3,827.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058
4,000.00	0.00	0.00	3,927.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058
4,100.00	0.00	0.00	4,027.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058
4,200.00	0.00	0.00	4,127.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058
4,300.00	0.00	0.00	4,227.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
4,400.00	0.00	0.00	4,327.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
4,500.00	0.00	0.00	4,427.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
4,600.00	0.00	0.00	4,527.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
4,700.00	0.00	0.00	4,627.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
4,771.76	0.00	0.00	4,699.00	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
WASATO		0.00	1,000.00	102.00	001.01	11,001,122.10	2,000,200.00	10 0 17.70211	100 20 20.000
4,800.00	0.00	0.00	4,727.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
4,900.00	0.00	0.00	4,827.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
5,000.00	0.00	0.00	4,927.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
5,100.00	0.00	0.00	5,027.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
5,200.00	0.00	0.00	5,127.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
5,300.00	0.00	0.00	5,227.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
5,400.00	0.00	0.00	5,327.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
5,500.00	0.00	0.00	5,427.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
5,600.00	0.00	0.00	5,527.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
5,700.00	0.00	0.00	5,627.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
5,800.00	0.00	0.00	5,727.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
5,900.00	0.00	0.00	5,827.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
6,000.00	0.00	0.00	5,927.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
6,100.00	0.00	0.00	6,027.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
6,200.00	0.00	0.00	6,127.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
6,300.00	0.00	0.00	6,227.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
6,400.00	0.00	0.00	6,327.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
6,500.00	0.00	0.00	6,427.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
6,600.00	0.00	0.00	6,527.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
6,700.00	0.00	0.00	6,627.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
6,800.00	0.00	0.00	6,727.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
6,900.00	0.00	0.00	6,827.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
7,000.00	0.00	0.00	6,927.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
7,100.00	0.00	0.00	7,027.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
7,200.00	0.00	0.00	7,127.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
7,300.00	0.00	0.00	7,227.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
7,400.00	0.00	0.00	7,327.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
7,500.00	0.00	0.00	7,427.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
7,600.00	0.00	0.00	7,527.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
7,700.00	0.00	0.00	7,627.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
7,800.00	0.00	0.00	7,727.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
7,900.00	0.00	0.00	7,827.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058
8,000.00	0.00	0.00	7,927.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
8,100.00	0.00	0.00	8,027.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
8,200.00	0.00	0.00	8,127.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
8,300.00	0.00	0.00	8,227.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
8,376.76	0.00	0.00	8,304.00	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05
MESAVE									
8,400.00	0.00	0.00	8,327.24	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.05



Project:

Site:

Design:

SDIPlanning Report - Geographic



Database: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

-25I4AS

NBU 921-25I Pad

PLAN #1

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-25I4AS GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

)

MD Reference:

GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

North Reference: True

Survey Calculation Method:

Minimum Curvature

Well:	NBU 921
Wellbore:	OH

Planned Survey Measured Vertical Map Мар Depth Inclination **Azimuth** Depth +N/-S +E/-W Northing **Easting** (ft) (usft) (usft) (ft) (°) (°) (ft) (ft) Latitude Longitude 8,500.00 0.00 0.00 8,427.24 -162.80 594.64 14,531,422.19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W 8,600.00 0.00 0.00 8,527.24 -162.80 594.64 14,531,422.19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W 109° 29' 25.058 W 0.00 0.00 8.627.24 594 64 14.531.422.19 40° 0' 17.762 N 8.700.00 -162.80 2.063.200.53 8,800.00 0.00 0.00 8,727.24 -162.80 594.64 14,531,422.19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W 8,900.00 0.00 0.00 8,827.24 -162.80 594.64 14,531,422.19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W 9,000.00 0.00 0.00 8,927.24 -162.80 594.64 14,531,422.19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W 9 100 00 0.00 0.00 9 027 24 -162 80 594.64 14 531 422 19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W 9,200.00 0.00 0.00 9,127.24 -162.80 594.64 14,531,422.19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W 9,300.00 0.00 0.00 9,227.24 -162.80 594.64 14,531,422.19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W 40° 0' 17.762 N 109° 29' 25.058 W 0.00 0.00 9.327.24 -162.80 594 64 14.531.422.19 9.400.00 2.063.200.53 9,500.00 0.00 0.00 9,427.24 -162.80 594.64 14,531,422.19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W 9,600.00 0.00 0.00 9,527.24 -162.80 594.64 14,531,422.19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W 9,666.76 0.00 0.00 9,594.00 -162.80 594.64 14,531,422.19 2,063,200.53 40° 0' 17.762 N 109° 29' 25.058 W **NBU 921-25I4AS PBHL**

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
NBU 921-25I4AS PBHL - plan hits target cen - Circle (radius 25.00		0.00	9,594.00	-162.80	594.64	14,531,422.19	2,063,200.53	40° 0' 17.762 N	109° 29' 25.058 W

C	asing Points							
		Measured Depth	Vertical Depth			Casing Diameter	Hole Diameter	
		(ft)	(ft)		Name	(in)	(in)	
		2,426.90	2,370.00	8 5/8"		8.625	11.000	

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	1,478.59 4,771.76		GREEN RIVER WASATCH				
	8,376.76	8,304.00	MESAVERDE				



SDIPlanning Report - Geographic



Database: EDM5000-RobertS-Local

OH PLAN #1

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

NBU 921-25I Pad

NBU 921-25I4AS

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

Well NBU 921-25I4AS GL 4980' & RKB 14' @ 4994.00ft (ASSUMED

)

GL 4980' & RKB 14'

@ 4994.00ft (ASSUMED

)

North Reference: True

Survey Calculation Method:

Minimum Curvature

Plan Annotations

Company:

Project:

Site:

Well:

Wellbore:

Design:

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		
		+N/-S (ft)	+E/-W (ft)	Comment
1,061.61	1,052.68	-26.58	97.07	Start 1525.73 hold at 1061.61 MD
2,587.34	2,524.80	-132.42	483.70	Start Drop -1.75
3,457.76	3,385.00	-162.80	594.64	Start 6209.00 hold at 3457.76 MD
9,666.76	9,594.00	-162.80	594.64	TD at 9666.76

NBU 921-25H3DS

Surface: 2,074' FSL 690' FEL (NE/4SE/4) BHL: 2,395' FNL 870' FEL (SE/4NE/4) Mineral Lease: UO 1189 ST

NBU 921-2512AS

Surface: 2,054' FSL 687' FEL (NE/4SE/4) BHL: 2,445' FSL 924' FEL (NE/4SE/4) Mineral Lease: UO 0868 ST

NBU 921-25I4AS

Surface: 2,045' FSL 686' FEL (NE/4SE/4) BHL: 1,882' FSL 91' FEL (NE/4SE/4) Mineral Lease: UO 0868 ST

NBU 921-25I4DS

Surface: 2,035' FSL 684' FEL (NE/4SE/4) BHL: 1,420' FSL 105' FEL (NE/4SE/4) Mineral Lease: UO 0868 ST

NBU 921-25IT

Monitor Well 2,064' FSL 689' FEL (NE/4SE/4) Mineral Lease: UO 0868 ST

> Pad: NBU 921-25I Section 25 T9S R21E

Uintah County, Utah Operator: Kerr-McGee Oil & Gas Onshore LP

MULTI-POINT SURFACE USE PLAN of OPERATIONS (SUPO)

This SUPO contains surface operating procedures for Kerr-McGee Oil & Gas Onshore LP (KMG), a wholly owned subsidiary of Anadarko Petroleum Corporation (APC) pertaining to actions that involve the State of Utah School and Institutional Trust Lands Administration (SITLA) in the development of minerals leased to APC/KMG (including, but not limited to, APDs/SULAs/ROEs/ROWs and/or easements).

See associated Utah Division of Oil, Gas, and Mining (UDOGM) Form 3(s), plats, maps, and other attachments for site-specific information on projects represented herein.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

A. <u>Existing Roads</u>:

Existing roads consist of county roads and improved/unimproved lease roads. APC/KMG will maintain

existing roads in a condition that is the same as or better than before operations began and in a safe and usable condition. Maintenance of existing roads will continue until final abandonment and reclamation of well pads and/or other facilities. The road maintenance may include, but is not limited to, blading, ditching, culvert installation/cleanout, surfacing, and dust control.

Typically, roads, gathering lines and electrical distribution lines will occupy common disturbance corridors and roadways will be used as working space. All disturbances located in the same corridor will overlap each other to the maximum extent possible; in no case will the maximum disturbance width of the access road and utility corridors exceed 50°, unless otherwise approved.

B. Planned Access Roads:

Approximately ± 110 ' (0.02 miles) of road re-route to this pad location is proposed (see Topo Map B). Applicable Uintah County encroachment and/or pipeline crossing permits will be obtained prior to construction/development. No other pipelines will be crossed at this location.

Where roads are new or to be reconstructed, they will be located, designed, and maintained to meet the standards of SITLA and other commonly accepted Best Management Practices (BMPs). If a new road/corridor were to cross a water of the United States, KMG will adhere to the requirements of applicable Nationwide or Individual Permits of the Department of Army Corps of Engineers.

Turnouts; major cut and fills; culverts; bridges; gates; cattle guards; low water crossings; or modifications needed to existing infrastructure/facilities were determined at the on-site and, as applicable, are typically shown on attached Exhibits and Topo maps.

C. <u>Location of Existing and Proposed Facilities</u>:

This pad will expand the existing pad for the CIGE 98D, which is a vertical producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records as of August 16, 2010.

Production facilities (see Well Pad Design Summary and Facilities Diagram):

Production facilities will be installed on the disturbed portion of each well pad and may include bermed components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will be constructed of compacted subsoil or corrugated metal, impervious, designed to hold 110% of the capacity of the largest tank, and be independent of the back cut. All permanent (on-site six months or longer) aboveground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with SITLA.

Production tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks are not to be used for disposal of liquids from additional sources without prior approval of UDOGM. Gathering facilities:

The following pipeline transmission facilities will apply if the well is productive (see Topo D):

The total gas gathering (steel line pipe with fusion bond epoxy coating) pipeline distances from the meter to the tie in point is $\pm 1,340$ ' and the individual segments are broken up as follows:

 ± 670 ' (0.1 miles) –New 8" buried gas pipeline from the meter to the edge of the pad. ± 670 ' (0.1 miles) –New 8" buried gas pipeline from the edge of pad to the NBU 921-25J pad intersection.

The total liquid gathering pipeline distance from the meter to the tie in point is $\pm 1,340$ ' and the individual segments are broken up as follows:

 ± 670 ' (0.1 miles) –New 4" buried liquid pipeline from the meter to the edge of the pad. ± 670 ' (0.1 miles) –New 4" buried liquid pipeline from the edge of pad to the NBU 921-25J pad intersection.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

The proposed pipelines will be buried and will include gas gathering and liquid gathering pipelines in the same trench. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. Kerr-McGee requests a permanent 30' right-of-way adjacent to the road for life-of-project for maintenance, repairs, and/or upgrades, no additional right-of-way will be needed beyond the 30'. Where the pipeline is not adjacent to the road or well pad, Kerr-McGee requests a temporary 45' construction right-of-way and 30' permanent right-of-way.

The proposed trench width for the pipeline would range from 18-48 inches and will be excavated to a depth of 48 to 60 inches of normal soil cover or 24 inches of cover in consolidated rock. During construction blasting may occur along the proposed right-of-way where trenching equipment cannot cut into the bedrock. Large debris and rocks removed from the earth during trenching and blasting that could not be returned to the trench would be distributed evenly and naturally in the project area. The proposed pipelines will be pressure tested pneumatically (depending on size) or with fluids (either fresh or produced). If fluids are used, there will be no discharge to the surface.

Pipeline signs will be installed along the right-of-way to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves, T's, and/or cathodic protection will be installed at various locations for connection, corrosion prevention and/or for safety purposes.

D. <u>Location and Type of Water Supply</u>:

Water for drilling purposes will be obtained from one of the following sources:

- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

Water will be hauled to location over the roads marked on Maps A and B. No water well is to be drilled on this lease.

E. Source of Construction Materials:

Construction operations will typically be completed with native materials found on location. If needed, construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source and described in subsequent Sundry requests. No construction materials will be removed from State lands without prior approval from SITLA.

F. <u>Methods of Handling Waste Materials</u>:

Should the well be productive, produced water will be contained in a water tank and will be transported by pipeline and/or truck to an approved disposal sites facilities and/or Salt Water Disposal (SWD) injection well. Currently, those facilities are:

RNI in Sec. 5 T9S R22E

Ace Oilfield in Sec. 2 T6S R20E MC&MC in Sec. 12 T6S R19E

Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

Ouray #1 SWD in Sec. 1 T9S R21E NBU 159 SWD in Sec. 35 T9S R21E CIGE 112D SWD in Sec. 19 T9S R21E CIGE 114 SWD in Sec. 34 T9S R21E NBU 921-34K SWD in Sec. 34 T9S R21E NBU 921-33F SWD in Sec. 33 T9S R21E NBU 921-34L SWD in Sec. 34 T9S R21E

Drill cuttings and/or fluids will be contained in the reserve/frac pit. Cuttings will be buried in pit(s) upon closure. Unless otherwise approved, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface runoff. Should fluid hydrocarbons be encountered during drilling, completions or well testing, product will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should

petroleum hydrocarbons unexpectedly be released into a pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by SITLA. Should timely removal prove infeasible, the pit will be netted with mesh no larger than 1 inch until such time as hydrocarbons can be removed. Hydrocarbon removal will also take place prior to the closure of the pit, unless authorization is provided for disposal via alternative pit closure methods (e.g. solidification).

The reserve and/or fracture stimulation pit will be lined with a synthetic material 20-mil or thicker, The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. Any additional pits necessary to subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

For the protection of livestock and wildlife, all open pits and cellars will be fenced/covered to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after six (6) months from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Additional drying methods may include fly-ash solidification or sprinkler evaporation. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift. Reserve pit liners will be cut off or folded as near to the mud surface as possible and as safety considerations allow and buried on location.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Any undesirable event, accidental release, or in excess of reportable quantities will be managed according to the notification requirements of UDOGMs "Reporting Oil and Gas Undesirable Events" rule, and, where State wells are participatory to a Federal agreement, according to NTL-3A.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities and may be kept in limited quantities on drilling sites and well locations for short periods of time during drilling or completion activities.

G. <u>Ancillary Facilities</u>:

Please note that the NBU 921-25IT well is going to be developed as a pressure monitoring well.

H. Well Site Layout (see Well Pad Design Summary):

The location, orientation and aerial extent of each drill pad; reserve/completion/flare pit; access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure; proposed cuts and fills; and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment and facility layout; however, the area of disturbance, as described in the survey, will not be exceeded.

Coordinates are provided in the National Spatial Reference System, North American Datum, 1983 (NAD83) or latest edition. Distances are depicted on each plat to the nearest two adjacent section lines.

I. Plans for Reclamation of the Surface:

Surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. This reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but are not limited to: re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation includes pit closure, re-contouring (where possible), soil bed preparation, topsoil placement, seeding, and/or weed control.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit.

Final Reclamation

Final reclamation will be performed for newly drilled unproductive wells and/or at the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by APC/KMG. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring, final grading will be conducted over the entire surface of the well site and access road. Where practical, the area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers and surface materials will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep perpendicular to the natural flow of water.

All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to UDOGM.

Seeding and Measures Common to Interim and Final Reclamation

Reclaimed areas may be fenced to exclude grazing and encourage re-vegetation.

On slopes where severe erosion can become a problem and the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. The slope will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to, erosion control blankets and bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage.

Seeding will occur year-round as conditions allow. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for revegetation. The site specific seed mix will be provided by SITLA.

J. Surface/Mineral Ownership:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

K. Other Information:

A Class I literature survey was conducted by Montgomery Archaeological Consultants, Inc. (MOAC). For additional details please refer to report MOAC 10-125

A paleontological reconnaissance has been conducted by Intermountain Paleo-Consulting (IPC) and a report will be submitted under separate cover.

A biological field survey was completed by Grasslands Consulting, Inc. on July 13, 2010. For additional details please refer to report GCI-291.

'APIWellNo:43047512710000'

M. Lessee's or Operators' Representative & Certification:

Danielle Piernot Regulatory Analyst I Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6156 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage for State lease activities is provided by State Surety Bond 22013542, and for applicable Federal lease activities and pursuant to 43 CFR 3104, by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Danielle Piernot

August 16, 2010

Date

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP'S 36 PROPOSED WELL LOCATIONS IN T9S, R21E, SECTION 25 (MOAC Report No. 10-125) UINTAH COUNTY, UTAH

By:

Nicole Shelnut

Prepared For:

State of Utah
School and Institutional Trust Lands Administration

Prepared Under Contract With:

Kerr-McGee Oil and Gas Onshore LP 1368 South 1200 East Vernal, Utah 84078

Prepared By:

Montgomery Archaeological Consultants, Inc. P.O. Box 219 Moab, Utah 84532

MOAC Report No. 10-125

July 26, 2010

State of Utah Public Lands Policy Coordination Office Permit No. 117

United States Department of Interior (FLPMA)
Permit No. 10-UT-60122



Grasslands Consulting, Inc.

4800 Happy Canyon Road, Suite 110, Denver, CO 80237 (303) 759-5377 Office (303) 759-5324 Fax

SPECIAL STATUS PLANT AND WILDLIFE SPECIES REPORT

Report Number: GCI #291

Report Date: August 3, 2010

Operator: Kerr-McGee Oil & Gas Onshore LP

Well: NBU 921-25I well pad (Bores: NBU 921-25H3DS, NBU 921-25I2AS, NBU 921-25I4AS,

NBU 921-25I4DS, and NBU 921-25IT)

Pipeline: Associated pipeline leading to proposed well pad

Access Road: Associated road leading to proposed well pad

Location: Section 25, Township 9 South, Range 21 East; Uintah County, Utah

Survey-Species: Uinta Basin Hookless Cactus (*Sclerocactus wetlandicus*)

Survey Date: July 13, 2010

Observers: Grasslands Consulting, Inc. Biologists: Brad Snopek, Jennie Sinclair, Jonathan

Sexauer, Adrienne Cunningham, Garrett Peterson and field technicians.





Kerr-McGee Oil & Gas Onshore LP PO Box 173779 DENVER, CO 80217-3779

July 15, 2010

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11 NBU 921-25I4AS

T9S-R21E

Section 25: NESE surface and bottom hole

Surface: 2045' FSL, 686' FEL Bottom Hole: 1882' FSL, 91' FEL

Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling.

- Kerr-McGee's NBU 921-25I4AS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance.
 Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

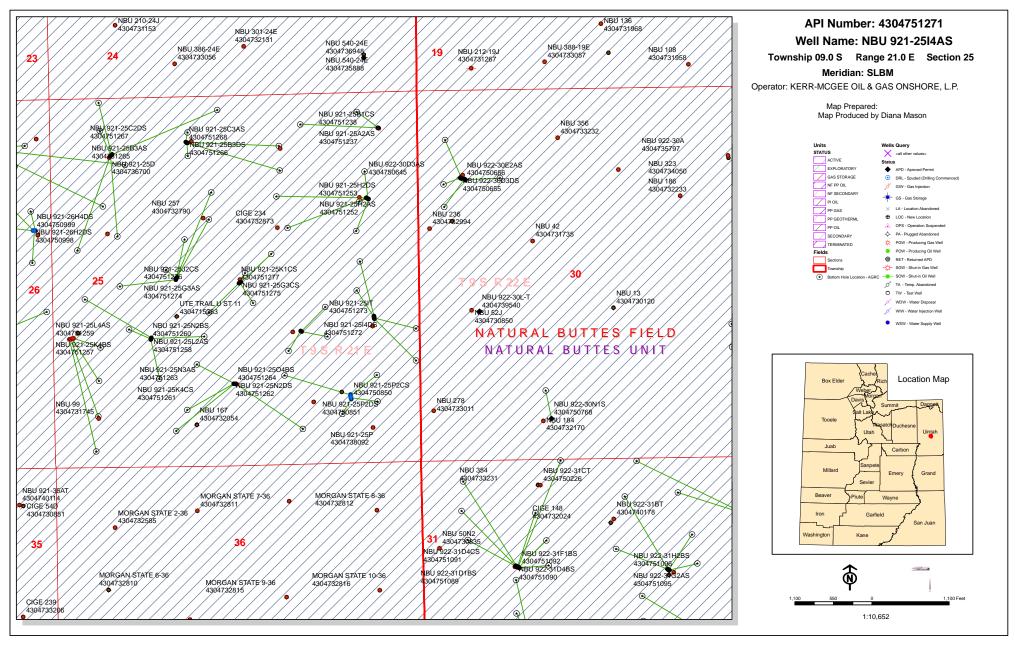
Therefore, based on the above stated information, Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Joe Matney

Sr. Staff Landman



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

August 17, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2010 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2010 within the Natural Buttes Unit, Uintah County, Utah.

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25A Pad

43-047-51237 NBU 921-25A2AS Sec 25 T09S R21E 0489 FNL 0565 FEL BHL Sec 25 T09S R21E 0252 FNL 0865 FEL

43-047-51238 NBU 921-25B1CS Sec 25 T09S R21E 0489 FNL 0575 FEL BHL Sec 25 T09S R21E 0416 FNL 1676 FEL

NBU 921-25D Pad

43-047-51239 NBU 921-25C1AS Sec 25 T09S R21E 0800 FNL 0893 FWL BHL Sec 25 T09S R21E 0190 FNL 2405 FWL

43-047-51240 NBU 921-25D1BS Sec 25 T09S R21E 0807 FNL 0885 FWL BHL Sec 25 T09S R21E 0060 FNL 0716 FWL

43-047-51241 NBU 921-25E1CS Sec 25 T09S R21E 0821 FNL 0871 FWL

BHL Sec 25 T09S R21E 1976 FNL 0947 FWL

43-047-51242 NBU 921-25E3AS Sec 25 T09S R21E 0828 FNL 0864 FWL BHL Sec 25 T09S R21E 2162 FNL 0371 FWL

43-047-51251 NBU 921-25D1CS Sec 25 T09S R21E 0814 FNL 0878 FWL

BHL Sec 25 T09S R21E 0460 FNL 0726 FWL

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25F Pad

43-047-51243 NBU 921-25F1BS Sec 25 T09S R21E 2580 FNL 1780 FWL BHL Sec 25 T09S R21E 1366 FNL 2296 FWL

43-047-51244 NBU 921-25F1CS Sec 25 T09S R21E 2571 FNL 1784 FWL

BHL Sec 25 T09S R21E 1754 FNL 2259 FWL

43-047-51245 NBU 921-25F3AS Sec 25 T09S R21E 2589 FNL 1776 FWL

BHL Sec 25 T09S R21E 2034 FNL 1905 FWL

 $43-047-51246\ \text{NBU}\ 921-25\text{F3CS}\ \text{Sec}\ 25\ \text{T09S}\ \text{R21E}\ 2598\ \text{FNL}\ 1772\ \text{FWL}$

BHL Sec 25 T09S R21E 2461 FNL 1628 FWL

43-047-51247 NBU 921-25L1BS Sec 25 T09S R21E 2607 FNL 1768 FWL

BHL Sec 25 T09S R21E 2597 FSL 0969 FWL

NBU 921-25H Pad

43-047-51248 NBU 921-25A3DS Sec 25 T09S R21E 1498 FNL 0736 FEL

BHL Sec 25 T09S R21E 1110 FNL 0776 FEL

43-047-51249 NBU 921-25G1CS Sec 25 T09S R21E 1489 FNL 0754 FEL

BHL Sec 25 T09S R21E 1895 FNL 1893 FEL

43-047-51250 NBU 921-25G2AS Sec 25 T09S R21E 1484 FNL 0763 FEL

BHL Sec 25 T09S R21E 1439 FNL 2042 FEL

43-047-51252 NBU 921-25H2AS Sec 25 T09S R21E 1493 FNL 0745 FEL

BHL Sec 25 T09S R21E 1538 FNL 0857 FEL

43-047-51253 NBU 921-25H2DS Sec 25 T09S R21E 1502 FNL 0727 FEL

BHL Sec 25 T09S R21E 1958 FNL 0913 FEL

NBU 921-25J Pad

43-047-51254 NBU 921-25J4AS Sec 25 T09S R21E 1878 FSL 1725 FEL

BHL Sec 25 T09S R21E 1795 FSL 1360 FEL

43-047-51255 NBU 921-25J4CS Sec 25 T09S R21E 1886 FSL 1743 FEL

BHL Sec 25 T09S R21E 1604 FSL 1920 FEL

43-047-51256 NBU 921-25J1DS Sec 25 T09S R21E 1882 FSL 1734 FEL

BHL Sec 25 T09S R21E 2218 FSL 1381 FEL

NBU 921-25K Pad

43-047-51257 NBU 921-25K4BS Sec 25 T09S R21E 1838 FSL 1400 FWL

BHL Sec 25 T09S R21E 1848 FSL 2161 FWL

43-047-51258 NBU 921-25L2AS Sec 25 T09S R21E 1848 FSL 1402 FWL

BHL Sec 25 T09S R21E 2423 FSL 0465 FWL

API #	WE	LL NAME				LOCA'	TION		
(Proposed PZ	WAS	ATCH-MESA V	ERDE)					
43-047-51259	NBU					R21E R21E			
43-047-51260	NBU					R21E R21E			
NBU 921-25N 1	Pad	52	200		2000	11222		 	
43-047-51261	NBU					R21E R21E			
43-047-51262	NBU					R21E R21E			
43-047-51263	NBU					R21E R21E			
43-047-51264	NBU					R21E R21E		 	
NBU 921-25C I	Pad								
43-047-51265	NBU					R21E R21E			
43-047-51266	NBU					R21E R21E			
43-047-51267	NBU					R21E R21E			
43-047-51268	NBU					R21E R21E			
NBU 921-25I 1	Pad								
43-047-51269	NBU					R21E R21E			
43-047-51270	NBU					R21E R21E			
43-047-51271	NBU					R21E R21E	-	 	
43-047-51272	NBU					R21E R21E			
43-047-51273	NBU					R21E R21E			

Page 4

API # WELL NAME

LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25J2 Pad

43-047-51274 NBU 921-25G3AS Sec 25 T09S R21E 2611 FSL 2578 FEL BHL Sec 25 T09S R21E 2265 FNL 2136 FEL 43-047-51275 NBU 921-25G3CS Sec 25 T09S R21E 2606 FSL 2587 FEL

BHL Sec 25 T09S R21E 2500 FSL 2587 FEL BHL Sec 25 T09S R21E 2530 FNL 2518 FEL

43-047-51276 NBU 921-25J2CS Sec 25 T09S R21E 2601 FSL 2596 FEL BHL Sec 25 T09S R21E 2310 FSL 2410 FEL

43-047-51277 NBU 921-25K1CS Sec 25 T09S R21E 2596 FSL 2605 FEL BHL Sec 25 T09S R21E 2186 FSL 2231 FWL

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard
DN: cn-Michael L. Coulthard, o-Bureau of Land Management, ou-Branch of Minerals
amail-Michael Coulthard; o-Bureau of Land Management, ou-Branch of Minerals
pate-2010 Rg J 14-5546, doi:

bcc: File - Natural Buttes Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:8-17-10

From: Jim Davis

To: Bonner, Ed; Garrison, LaVonne; Hill, Brad; Mason, Diana

CC: Bartlett, Floyd; Laura.Gianakos@anadarko.com; Piernot, Danielle; Upch...

Date: 9/2/2010 9:13 AM

Subject: SITLA approval of Kerr McGee wells **Attachments:** KMG approvals and paleo 9.1.2010.xlsx

The following wells have been approved by SITLA including arch clearance. Paleo clearance is also granted with stipulations as noted.

Full Paleo monitoring: All ground-disturbing activities must be monitored by a permitted paleontologist.

```
NBU 922-29F4DS [API #4304751207] Full Monitoring IPC 10-08
 NBU 922-29G4CS [API #4304751208] Full Monitoring
                                                  IPC 10-08
 NBU 922-29J4BS [API #4304751209] Full Monitoring
                                                  IPC 10-08
 NBU 922-29K1DS [API #4304751210] Full Monitoring
                                                   IPC 10-08
 NBU 922-29G1AS [API #4304751194] Full Monitoring
                                                   IPC 10-06
 NBU 922-29G1DS [API #4304751195] Full Monitoring
                                                   IPC 10-06
 NBU 922-29G2BS [API #4304751196] Full Monitoring
                                                  IPC 10-06
 NBU 922-29G3BS [API #4304751197] Full Monitoring
                                                  IPC 10-06
NBU 921-25A3DS [API 4304751248]
                                                  IPC 10-21
                                    Full Monitoring
NBU 921-25G1CS [API 4304751249]
                                                  IPC 10-21
                                    Full Monitoring
NBU 921-25G2AS [API 4304751250]
                                                  IPC 10-21
                                    Full Monitoring
NBU 921-25H2AS [API 4304751252]
                                    Full Monitoring
                                                  IPC 10-21
NBU 921-25H2DS [API 4304751253]
                                    Full Monitoring
                                                  IPC 10-21
NBU 921-25G3AS [API 4304751274]
                                    Full Monitoring
                                                  IPC 10-23
NBU 921-25G3CS [API 4304751275]
                                                  IPC 10-23
                                    Full Monitoring
NBU 921-25J2CS [API 4304751276]
                                                  IPC 10-23
                                    Full Monitoring
NBU 921-25K1CS [API 4304751277]
                                                  IPC 10-23
                                    Full Monitoring
NBU 921-25A2AS [API 4304751237]
                                    Full Monitoring IPC 10-21
NBU 921-25B1CS [API 4304751238]
                                    Full Monitoring IPC 10-21
```

Spot Paleo Monitoring: All ground-disturbing activities must be monitored by a permitted paleontologist at the beginning of construction and thereafter spot-monitored as paleontological conditions merit.

```
Spot Monitoring IPC 10-20
NBU 921-25C1AS [API 4304751239]
NBU 921-25D1BS [API 4304751240]
                                    Spot Monitoring IPC 10-20
                                    Spot Monitoring IPC 10-20
NBU 921-25D1CS [API 4304751251]
NBU 921-25E1CS [API 4304751241]
                                    Spot Monitoring IPC 10-20
NBU 921-25E3AS [API 4304751242]
                                    Spot Monitoring IPC 10-20
NBU 921-25F1BS [API 4304751243]
                                    Spot Monitoring IPC 10-21
NBU 921-25F1CS [API 4304751244]
                                    Spot Monitoring IPC 10-21
NBU 921-25F3AS [API 4304751245]
                                    Spot Monitoring IPC 10-21
NBU 921-25F3CS [API 4304751246]
                                    Spot Monitoring IPC 10-21
NBU 921-25L1BS [API 4304751247]
                                    Spot Monitoring IPC 10-21
NBU 921-25J1DS [API 4304751256]
                                    Spot Monitoring IPC 10-23
NBU 921-25J4AS [API 4304751254]
                                    Spot Monitoring IPC 10-23
NBU 921-25J4CS [API 4304751255]
                                    Spot Monitoring IPC 10-23
NBU 921-25K4BS [API 4304751257]
                                    Spot Monitoring IPC 10-22
NBU 921-25L2AS [API 4304751258]
                                    Spot Monitoring IPC 10-22
NBU 921-25L4AS [API 4304751259]
                                    Spot Monitoring IPC 10-22
                                    Spot Monitoring IPC 10-22
NBU 921-25N2BS [API 4304751260]
NBU 921-25K4CS [API 4304751261]
                                    Spot Monitoring IPC 10-23
NBU 921-25N2DS [API 4304751262]
                                    Spot Monitoring IPC 10-23
NBU 921-25N3AS [API 4304751263]
                                    Spot Monitoring IPC 10-23
```

```
NBU 921-25O4BS [API 4304751264]
                                    Spot Monitoring IPC 10-23
NBU 921-25B3AS [API 4304751265]
                                    Spot Monitoring IPC 10-20
                                    Spot Monitoring IPC 10-20
NBU 921-25B3DS [API 4304751266]
NBU 921-25C2DS [API 4304751267]
                                    Spot Monitoring IPC 10-20
                                    Spot Monitoring IPC 10-20
NBU 921-25C3AS [API 4304751268]
NBU 921-25IT [API 4304751273]
                                    Spot Monitoring IPC 10-23
NBU 921-25H3DS [API 4304751269]
                                    Spot Monitoring IPC 10-23
NBU 921-25I2AS [API 4304751270]
                                    Spot Monitoring IPC 10-23
NBU 921-25I4AS [API 4304751271]
                                    Spot Monitoring IPC 10-23
NBU 921-25I4DS [API 4304751272]
                                    Spot Monitoring IPC 10-23
NBU 922-29A1BS [API #4304751183]
                                    Spot Monitoring IPC 10-06
 NBU 922-29A1CS [API #4304751184] Spot Monitoring IPC 10-06
 NBU 922-29A4CS [API #4304751185] Spot Monitoring IPC 10-06
 NBU 922-29H1BS [API #4304751186] Spot Monitoring IPC 10-06
 NBU 922-29B2CS [API #4304751187] Spot Monitoring IPC 10-06
                                                             (SITLA surf/ Fed Min)
 NBU 922-29B4AS [API #4304751188] Spot Monitoring IPC 10-06
 NBU 922-29C2AS [API #4304751189] Spot Monitoring IPC 10-06
                                                             (SITLA surf/ Fed Min)
 NBU 922-29C4AS [API #4304751190] Spot Monitoring IPC 10-06
 NBU 922-29B1AS [API #4304751191] Spot Monitoring IPC 10-06
 NBU 922-29B1DS [API #4304751192] Spot Monitoring IPC 10-06
 NBU 922-29B2BS [API #4304751193] Spot Monitoring IPC 10-06
 NBU 922-29D4DS [API #4304751198] Spot Monitoring IPC 10-05
 NBU 922-29E3BS [API #4304751199] Spot Monitoring IPC 10-05
 NBU 922-29F3AS [API #4304751200] Spot Monitoring IPC 10-05
 NBU 922-29F3BS [API #4304751201] Spot Monitoring IPC 10-05
 NBU 922-29G4AS [API #4304751202] Spot Monitoring IPC 10-06
 NBU 922-29H1CS [API #4304751203] Spot Monitoring IPC 10-06
 NBU 922-29H4CS [API #4304751204] Spot Monitoring IPC 10-06
 NBU 922-2911BS [API #4304751205] Spot Monitoring IPC 10-06
 NBU 922-29I1CS [API #4304751206] Spot Monitoring IPC 10-06
 NBU 922-29K2CS [API #4304751211] Spot Monitoring IPC 10-07
 NBU 922-29K4AS [API #4304751212] Spot Monitoring IPC 10-07
 NBU 922-29L1AS [API #4304751213] Spot Monitoring IPC 10-07
 NBU 922-29L2BS [API #4304751214] Spot Monitoring IPC 10-07
 NBU 922-29L2CS [API #4304751215] Spot Monitoring IPC 10-07
 NBU 922-29L3CS [API #4304751216] Spot Monitoring IPC 10-07
 NBU 922-29M2AS [API #4304751217] Spot Monitoring IPC 10-07
 NBU 922-29N2BS [API #4304751218] Spot Monitoring IPC 10-07
 NBU 922-29N3BS [API #4304751219] Spot Monitoring IPC 10-07
 NBU 922-30I4BS [API #4304751220] Spot Monitoring IPC 10-07 (SITLA surf/ Fed Min)
 NBU 922-30I4CS [API #4304751221] Spot Monitoring IPC 10-07 (SITLA surf/Fed Min)
 NBU 922-29J4CS [API #4304751222] Spot Monitoring IPC 10-08
 NBU 922-29N1BS [API #4304751223] Spot Monitoring IPC 10-08
 NBU 922-29O1CS [API #4304751224] Spot Monitoring IPC 10-08
```

That's quite a list, so I'm attaching a quick-and-dirty spreadsheet of the same data. This may be helpful to some of you.

Thanks.

-Jim

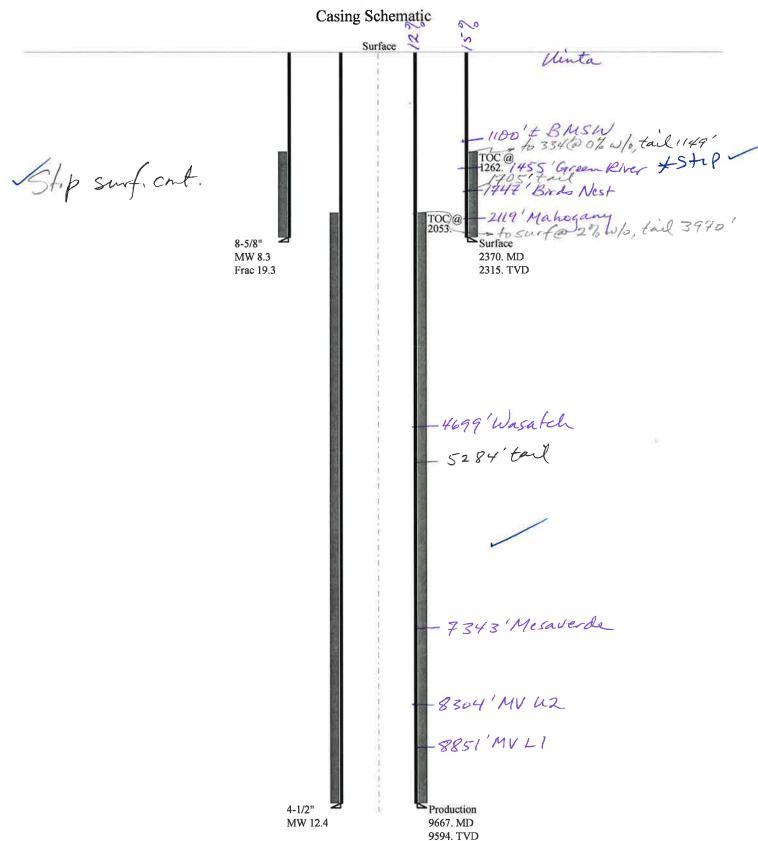
'APIWellNo:43047512710000'

Jim Davis Utah Trust Lands Administration jimdavis1@utah.gov Phone: (801) 538-5156

BOPE REVIEW KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-2514AS 43047512710000

Well Name		KERR-MCGEE O	OIL & GA	AS ONSI	HORE,	L.P. NBU 921	-25I4A	S 4304751271	
String		Surf	Prod				i II		
Casing Size(")		8.625	4.50	0	7				
Setting Depth (TVD)		2370	9594	1	1				
Previous Shoe Setting Dept	th (TVD)	40	2370)			Ī		
Max Mud Weight (ppg)		8.3	12.4				Ī		
BOPE Proposed (psi)		500	5000)			Ī		
Casing Internal Yield (psi)		3390	7780)			Ī		
Operators Max Anticipated	d Pressure (psi)	6044	12.1				Ī		
									<u> </u>
Calculations	Sur	rf String					.625	"	
Max BHP (psi)		.052*Setti	ıng D	epth*	MW	1027	_	DODE A I	4 E D'III A 15 W C : 4 D 40
MACD (C) ()		DIID (0.128	*C -44	D-	41e \		_		equate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		IX BHP-(0.12*					=	NO	air drill
MASP (Gas/Mud) (psi)	Ma	x BHP-(0.22*	*Setti	ing De	pth)	506	_	NO E II	OK STATE OF THE ST
n Arn Ci	NA DAM 204/G // F		CI		4.5	-	_		Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	<u> </u>	Depth - Previo	ous Sr	10e De	pth)	514	ᆜ	NO .	Reasonable depth in area
Required Casing/BOPE Te						2370	_	psi	
*Max Pressure Allowed @	Previous Casing Shoe=					40		psi *Ass	sumes 1psi/ft frac gradient
Calculations	Pro	d String				4.	.500	"	
Max BHP (psi)		.052*Setti	ing D	epth*	MW	6186	=		
4 /				1		1,		BOPE Ad	equate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Ма	x BHP-(0.12*	*Setti	ing De	pth)	= 5035	=	NO	i
MASP (Gas/Mud) (psi)	Ma	x BHP-(0.22*	*Setti	ing De	pth)			YES	OK
, , , ,						1,	_	1	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Γ	Depth - Previo	us Sh	noe De	pth)	= 4597	=	NO	Reasonable
Required Casing/BOPE Te	est Pressure=					5000	=	psi	
*Max Pressure Allowed @	Previous Casing Shoe=					2370	=	psi *Ass	sumes 1psi/ft frac gradient
Calculations		String						"	
Max BHP (psi)		.052*Setti	ing D	epth*	MW				
						_	_	BOPE Ad	equate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		x BHP-(0.12*			_			NO	
MASP (Gas/Mud) (psi)	Ma	x BHP-(0.22*	*Setti	ing De	pth)	=		NO	
			~.		• • •		_	*Can Full	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	<u> </u>	Depth - Previo	us Sh	ioe De	pth)	=	_	NO	
Required Casing/BOPE Te						<u> </u>		psi	
*Max Pressure Allowed @	Previous Casing Shoe=							psi *Ass	sumes 1psi/ft frac gradient
Calculations	5	String			_			"	
Max BHP (psi)		.052*Setti	ing D	epth*	MW		=		
4 /				1				BOPE Ad	equate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Ma	x BHP-(0.12*	*Setti	ing De	pth)	=		NO	
MASP (Gas/Mud) (psi)		x BHP-(0.22*				-1'	=	NO	
, ,		<u> </u>				-		1-	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Γ	Depth - Previo	us Sh	noe De	pth)	=		NO	ji
						-			
Required Casing/BOPE Te	est Pressure=							psi	

43047512710000 NBU 921-25I4AS



Well name:

43047512710000 NBU 921-25I4AS

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

String type:

Surface

Project ID: 43-047-51271

Location:

UINTAH

COUNTY

Desig	an ba	ırame	eters:
A - II			

Collapse

Mud weight: Design is based on evacuated pipe.

8.330 ppg

Minimum design factors:

Collapse:

Design factor 1.125 **Environment:**

H2S considered? Surface temperature:

No 74 °F 106 °F

Bottom hole temperature: Temperature gradient:

1.40 °F/100ft

Minimum section length:

100 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

2,086 psi 0.120 psi/ft 2,363 psi

No backup mud specified.

Burst: Design factor

1.00

Cement top:

1,262 ft

Tension:

8 Round STC: 1.80 (J) 8 Round LTC: 1.70 (J) 1.60 (J) Buttress:

Premium: 1.50 (J) Body yield: 1.50 (B)

Tension is based on air weight. Neutral point: 2,075 ft Directional Info - Build & Drop

Kick-off point 300 ft Departure at shoe: 444 ft Maximum dogleg: 2 °/100ft

15.23° Inclination at shoe:

Re subsequent strings:

Next setting depth: 9,594 ft Next mud weight: 12.400 ppg 6,180 psi Next setting BHP: Fracture mud wt: 19.250 ppg Fracture depth: 2,370 ft

Injection pressure: 2,370 psi

Run	Segment		Nominal		End	True Vert	Measured	Drift	Est.
Seq	Length (ft)	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Cost (\$)
1	2370	8.625	28.00	I-55	LT&C	2315	2370	7.892	93852
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1002	1880	1.877	2363	3390	1.43	64.8	348	5.37 J

Prepared by:

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: September 29,2010 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2315 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

43047512710000 NBU 921-25I4AS

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

String type:

Production

Project ID:

43-047-51271

Location:

UINTAH

COUNTY

Environment:

Collapse

Mud weight: Internal fluid density:

Design parameters:

12.400 ppg 2.330 ppg

Minimum design factors: Collapse: Design factor

1.125

H2S considered?

No 74 °F Surface temperature: Bottom hole temperature: 208 °F

1.40 °F/100ft Temperature gradient: Minimum section length:

100 ft

Burst:

Design factor

1.00

Cement top:

2,053 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

4,069 psi 0.220 psi/ft 6,180 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC: 1.60 (J) Buttress: Premium: 1.50 (J)

Body yield: 1.60 (B)

Tension is based on air weight. Neutral point: 7.889 ft Directional Info - Build & Drop

Kick-off point 300 ft Departure at shoe: 617 ft Maximum dogleg: 2 °/100ft

0° Inclination at shoe:

Drift End **True Vert** Measured Est. **Nominal** Run Segment Cost Finish Depth Depth Diameter Sea Length Size Weight Grade (ft) (in) (ft) (lbs/ft) (ft) (in) (\$) 1 9667 4.5 11.60 **I-80** LT&C 9594 9667 3.875 127604 **Burst Tension Tension Tension** Run Collapse Collapse Collapse **Burst** Burst Load Strength Design Strength Design Load Strength Design Load Seq **Factor** (psi) **Factor** (kips) (kips) (psi) **Factor** (psi) (psi) 1.26 111.3 212 1.90 J 1 5019 6360 1.267 6180 7780

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: September 29,2010 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9594 ft, a mud weight of 12.4 ppg. An internal gradient of .121 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.

Well Name NBU 921-25I4AS

API Number 43047512710000 APD No 2957 Field/Unit NATURAL BUTTES

Location: 1/4,1/4 NESE Sec 25 Tw 9.0S Rng 21.0E 2045 FSL 686 FEL

GPS Coord (UTM) 628684 4429240 Surface Owner

Participants

Floyd Bartlett (DOGM), Sheila Wopsock, Clay Einerson, Roger Perry, Laura Gianokas, Lovel Young, Grizz Oleen, (Kerr McGee), Mitch.Batty, John Slaugh, (Timberline Engineering and Land Surveying), Ed Bonner (SITLA), Ben Williams (UDWR).

Regional/Local Setting & Topography

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 34 air miles and 42.9 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The NBU 921-25I pad will be created by enlarging the existing pad of the CIGE 98D gas well. Five gas wells, to be directionally drilled, will be added. They are the NBU 921-25H3DS, 921-25IT, 921-25I2AS, 921-25I4AS and 921-25I4DS. The existing pad will be extended in all directions except to the south. The site is on the west slope of a ridge which continues beyond the location into broken terrain. Small drainages near Corner 11 and within the pad area north of the old pad will be filled. A drainage immediately south of the location will be avoided. No diversions are needed. The White River is approximately 3 1/2 miles down drainage. The selected site appears to be suitable for enlarging a pad, drilling and operating the proposed wells and is the best site in the immediate area.

Both the surface and minerals are owned by SITLA.

Surface Use Plan

Current Surface Use

Grazing Wildlfe Habitat

Existing Well Pad

New Road Miles Well Pad Src Const Material Surface Formation

0 Width 352 Length 415 Onsite UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

10/5/2010 Page 1

Vegetation is a poor desert shrub type, which includes shadscale, Russian thistle, Indian ricegrass, curly mesquite, broom snakeweed and halogeton..

Antelope, sheep during the winter, rabbits, coyotes, and small mammals, birds and raptors.

Soil Type and Characteristics

Surface soils are shallow sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? Y Paleo Potental Observed? N Cultural Survey Run? Y Cultural Resources? N

Reserve Pit

Site-Specific Factors	Site R	anking	
Distance to Groundwater (feet)	100 to 200	5	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)		20	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches) Affected Populations		0	
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	40	1 Sensitivity Level

Characteristics / Requirements

The proposed reserve pit is 104' x 260' x 12' deep located in a cut on the northeast side of the location. Kerr McGee plans a 30-mil liner with a double felt sub-liner.

Closed Loop Mud Required? N Liner Required? Liner Thickness 30 Pit Underlayment Required? Y

Other Observations / Comments

Evaluator	Date / Time
Floyd Bartlett	8/26/2010

10/5/2010 Page 2

10/5/2010

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
2957	43047512710000	SITLA	GW	S	No
Operator	KERR-MCGEE OIL & GAS ONS	HORE, L.P.	Surface Owner-APD		
Well Name	NBU 921-25I4AS		Unit	NATURAL B	UTTES
Field	NATURAL BUTTES		Type of Work	DRILL	
Location	NESE 25 9S 21E S 2045	FSL 686 FEI	GPS Coord (UTM)	628688E 4429	242N

Geologic Statement of Basis

Kerr McGee proposes to set 2,370' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 1,100'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 25. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect any usable ground water.

Brad Hill 9/28/2010 **APD Evaluator Date / Time**

Surface Statement of Basis

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 34 air miles and 42.9 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

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Both the surface and minerals are owned by SITLA. Ed Bonner represented SITLA at the pre-site investigation. Mr. Bonner had no concerns pertaining to this location. SITLA will provide site reclamation standards and a seed mix.

Ben Williams represented the Utah Division of Wildlife Resources. Mr. Williams stated the area is classified as crucial yearlong antelope habitat but recommended no restrictions for this species. No other wildlife will be significantly affected.

Floyd Bartlett 8/26/2010
Onsite Evaluator Date / Time

'APIWellNo:43047512710000'

10/5/2010

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 2

Conditions of Approval / Application for Permit to Drill

Category Condition

Pits A synthetic liner with a minimum thickness of 30 mils with a double felt subliner shall be properly installed and

maintained in the reserve pit.

Surface The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/17/2010 **API NO. ASSIGNED:** 43047512710000

WELL NAME: NBU 921-25I4AS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: NESE 25 090S 210E **Permit Tech Review:**

> **SURFACE: 2045 FSL 0686 FEL Engineering Review:**

> BOTTOM: 1882 FSL 0091 FEL Geology Review:

COUNTY: UINTAH

LATITUDE: 40.00547 **LONGITUDE:** -109.49235 **UTM SURF EASTINGS: 628688.00** NORTHINGS: 4429242.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE LEASE NUMBER: UO 0868 ST

✓ Drilling Unit

SURFACE OWNER: 3 - State COALBED METHANE: NO

RECEIVED AND/OR REVIEWED: LOCATION AND SITING:

✓ PLAT R649-2-3.

Unit: NATURAL BUTTES Bond: STATE/FEE - 22013542

Potash R649-3-2. General

Oil Shale 190-3 R649-3-3. Exception

Board Cause No: Cause 173-14 Water Permit: Permit #43-8496

Effective Date: 12/2/1999 **RDCC Review:**

Siting: Suspends General Siting **Fee Surface Agreement**

R649-3-11. Directional Drill ✓ Intent to Commingle

Commingling Approved

Oil Shale 190-5

Oil Shale 190-13

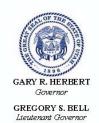
Comments: Presite Completed

Stipulations:

3 - Commingling - ddoucet 5 - Statement of Basis - bhill

15 - Directional - dmason 17 - Oil Shale 190-5(b) - dmason 25 - Surface Casing - hmacdonald

API Well No: 43047512710000



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 921-25I4AS API Well Number: 43047512710000 Lease Number: UO 0868 ST

Surface Owner: STATE **Approval Date:** 10/5/2010

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

API Well No: 43047512710000

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels OR
- submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas

	STATE OF UTAH		FORM 9	
	DIVISION OF OIL, GAS, AND M			5.LEASE DESIGNATION AND SERIAL NUMBER: UO 0868 ST
SUND	RY NOTICES AND REPORTS	S ON W	VELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-25I4AS			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.			9. API NUMBER: 43047512710000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PH treet, Suite 600, Denver, CO, 80217 377	I ONE NUME '9	BER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2045 FSL 0686 FEL				COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 25	IP, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian:	: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICA	ATE NATU	JRE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
	☐ ACIDIZE	☐ ALTE	ER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	СНА	NGE TUBING	CHANGE WELL NAME
SUBSEQUENT REPORT	CHANGE WELL STATUS		MINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
Date of Work Completion:	☐ DEEPEN ☐ OPERATOR CHANGE		CTURE TREAT	 □ NEW CONSTRUCTION □ PLUG BACK
	PRODUCTION START OR RESUME	_	AND ABANDON	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION		ETRACK TO REPAIR WELL	TEMPORARY ABANDON
11/17/2010	☐ TUBING REPAIR		T OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA	A STATUS EXTENSION	APD EXTENSION
Report Bute.	□ WILDCAT WELL DETERMINATION	□ отні	ER	OTHER:
12 DESCRIBE PROPOSED OR CO	MPLETED OPERATIONS. Clearly show all p	ertinent de	etails including dates, denths, v	olumes etc
RAN 14" 36.7# SCH	BUCKET RIG. DRILLED 20" (EDULE 10 CONDUCTOR PIPE. OCATION ON NOVEMBER 17,	. CMT V	N/ 28 SX READY MI)) AT 14:00 HRS. U Oil	ccepted by the Itah Division of , Gas and Mining RECORD(ONLY
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBE 720 929-6100		I TLE egulatory Analyst	
SIGNATURE N/A			ATE 1/19/2010	

STATE OF UTAH **DEPARTMENT OF NATURAL RESOURCES** DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

P.O. Box 173779

city DENVER

state CO zip 80217

Phone Number: _(720) 929-6100

Well 1

API Number	Well I	Name	QQ	QQ Sec Twp		Rng County		
4304751271	NBU 921-25	I4AS	NESE	25	98	21E	UINTAH	
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		ty Assignment fective Date	
В	99999	3900	1	1/17/20	10	11	129/10	
Comments: MIRU	PETE MARTIN BUCKE	. \	NVD		·	L	10/1/10	

SPUD WELL LOCATION ON 11/17/2010 AT 14:00 HRS.

BHL = NESE

Well 2

API Number	Well	Name QQ Sec 7				Rng	County
4304751272	NBU 921-25	I4DS	NESE	25	98	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	S	pud Da	te		ty Assignment fective Date
B	99999	2900	1	1/17/20	10	11	109/10

Comments:

MIRU PETE MARTIN BUCKET RIG. WSM VD SPUD WELL LOCATION ON 11/17/2010 AT 15:30 HRS.

Well 3

API Number	mber Well Name		QQ	Sec	Twp	Rng	County	
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date		
omments:								

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity

 Color (Explain in Comments' section)

 RECEIVED

NOV 2 2 2010

ANDY LYTLE

Title

Name (Please Print)

REGULATORY ANALYST

11/22/2010

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OTL GAS AND MINING					
	DIVISION OF OIL, GAS, AND MININ	G	5.LEASE DESIGNATION AND SERIAL NUMBER: UO 0868 ST			
SUND	RY NOTICES AND REPORTS OF	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES				
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-25I4AS					
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047512710000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE N Street, Suite 600, Denver, CO, 80217 3779	NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2045 FSL 0686 FEL			COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 25	IP, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian: S		STATE: UTAH			
CHE	CK APPROPRIATE BOXES TO INDICATE N	NATURE OF NOTICE, REPORT,	OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
	ACIDIZE	ALTER CASING	CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	☐ CHANGE WELL NAME			
	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION			
	☐ OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK			
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
Date of Spud.	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
✓ DRILLING REPORT	L TUBING REPAIR	VENT OR FLARE	☐ WATER DISPOSAL			
Report Date: 11/29/2010	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION			
==, ==, ====	☐ WILDCAT WELL DETERMINATION ☐	OTHER	OTHER:			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PROPETRO AIR RIG ON NOVEMBER 27, 2010. DRILLED 11" SURFACE HOLE TO 2600'. RAN 8 5/8" 28# IJ-55 SURFACE CSG. PUMP 140 BBLS FRESAccepted by the WATER. PUMP 20 BBLS GEL WATER. PUMP 350 SX CLASS G PREM @ 15.8 Utah Division of PPG, 1.15 YD. NO CIRC. DROP PLUG ON THE FLY, DISPLACED W/ 154 BBCH, Gas and Mining WATER. NO RETURNS, BUMP PLUG & HOLD 750 PSI FOR 5 MIN. FLOAT FINAL LIFT 400 PSI. TOP OUT #1 W/ 100 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. WOC. TOP OUT #2 W/ 125 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. WOC. TOP OUT #3 W/ 100 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. WOC. TOP OUT #4 W/ 125 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. WOC. TOP OUT #5 W/ 100 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. WOC. TOP OUT #5 W/ 100 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. WOC. TOP OUT #6 W/ 150 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. WOC. TOP OUT #7 W/ 150 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. GOOD CEMENT TO SURFACE & CEMENT STAYED AT SURFACE. WORT.						
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst				
SIGNATURE N/A		DATE 11/30/2010				

BLM - Vernal Field Office - Notification Form

Operator <u>KERR MCGEE</u> Rig Name	e/# <u>H&P 311</u>			
Submitted By PAT CAIN Phone Number 435- 790-1884				
Well Name/Number NBU 921-25I4AS				
Qtr/Qtr NE/SE Section 25 Township 9S Range 21E				
Lease Serial Number <u>UO 0868 ST</u>				
API Number43-047-51271				
<u>Spud Notice</u> – Spud is the initial spudding of the well, not drilling				
out below a casing string.	, ,			
5 5				
Date/Time	AM 📄 PM 🔙			
				
<u>Casing</u> – Please report time casing run starts, not cementing				
times.				
Surface Casing	DECEN/ED			
Intermediate Casing	RECEIVED			
Production Casing	JAN 1 2 2011			
Liner	DIV. OF OIL, GAS & MINING			
Other	577. 01. 01.2, 22.10 23.11.11.11			
Date/Time AM P	м 🗍			
,				
BOPE				
Initial BOPE test at surface casing point				
BOPE test at intermediate casing point				
30 day BOPE test				
Other				
Date/Time <u>1/13/2011</u> <u>08</u>	:00 AM 🔀 PM 🗌			
54te, Time <u>1/15/2011</u> <u>50</u>	.00 / 11 11 11			
Remarks				

	STATE OF UTAH DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND M		FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: UO 0868 ST
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 921-25I4AS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047512710000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 720 929-6515 Ext		9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2045 FSL 0686 FEL		COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 25 Township: 09.0S Range: 21.0E Meridian: S		STATE: UTAH	
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
ACIDIZE			
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBE 720 929-6100	R TITLE Regulatory Analyst	
SIGNATURE N/A		DATE 1/24/2011	

BLM - Vernal Field Office - Notification Form

Oper	ator <u>KERR MCGEE</u> Rig Name	:/# H&P :	311
	nitted By <u>DOUG BARONE</u> Phone		
	Name/Number <u>NBU 921-25I4AS</u>		00 700 100 1
	Qtr <u>NE/SE</u> Section <u>25</u> Tow		Range 21F
	e Serial Number <u>UO</u> 0868 ST	113111P _ <u></u>	Range _zre
	Number43-047-51271		
VI I I	Number45-047-51271		
Spud	Notice – Spud is the initial spudd	ing of the	well not drilling
-	pelow a casing string.	ing or the	wen, not arming
out b	clow a casing string.		
	Date/Time	AM	PM 🗌
		/ \\ \ \	
Casir	ng – Please report time casing run	starts, no	t cementing
times	-	•	J
	Surface Casing		RECEIVED
	Intermediate Casing		
=	Production Casing		JAN 2 4 2011
	Liner		DIV. OF OIL, GAS & MINING
	Other		
	Date/Time <u>1/22/11</u> 09:00	$oxed{oxed}$ AM $igtimes$	PM 🗍
BOPE			
	Initial BOPE test at surface casing	point	
	BOPE test at intermediate casing	•	
	30 day BOPE test		
	Other		
	Date/Time AM	PM 🗌	
		, ···	
Rema	arks		

Sundry Number: 13772 API Well Number: 43047512710000

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ	IG	5.LEASE DESIGNATION AND SERIAL NUMBER: UO 0868 ST
	RY NOTICES AND REPORTS O		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	sals to drill new wells, significantly deepen exi Igged wells, or to drill horizontal laterals. Use		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 921-25I4AS
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4. LOCATION OF WELL FOOTAGES AT SURFACE: 2045 FSL 0686 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 25	(P, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE I	NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
This well was pla	□ ACIDIZE □ CHANGE TO PREVIOUS PLANS □ CHANGE WELL STATUS □ DEEPEN □ OPERATOR CHANGE ✓ PRODUCTION START OR RESUME □ REPERFORATE CURRENT FORMATION □ TUBING REPAIR □ WATER SHUTOFF □ WILDCAT WELL DETERMINATION □ MPLETED OPERATIONS. Clearly show all pertine acced on production on 03/24/20 istory will be submitted with the	11 at 2:20 p.m. The well completion report. A Color Col	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL APD EXTENSION OTHER: Columes, etc. ACCEPTED by the Utah Division of Gas and Mining RECORD ONLY
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE	
Andy Lytle	720 929-6100	Regulatory Analyst	
SIGNATURE N/A		DATE 3/24/2011	

				RTMEN	TATE (TOF NA FOIL,	TURA	L RESC		-				(hi 5. L		chang SIGNA	ges) TION		F ERIAL NUI	FORM 8 MBER:
						······································								OU OU			OR TRI	BE NAME	
WELI	L COM	PLET	ION	OR F	RECO	MPL	ETIC	ON R	EPOF	INA TS	D LO	3		HOME	, ALLO	1166	OK IN	DE NAME	
1a. TYPE OF WELL:		OH WE			GAS Z]	DRY		отн	ER			1	UTU6			NAN TV	1E	
	HORIZ.	DE EN]	RE- ENTRY]	DIFF. RESVR.		отн	ER	····			VELL NAI					-
2. NAME OF OPERA	GEE OIL	. & GA	S ON	SHOF	RE, L.F)								PI NUME 43047		71			
P.O.BOX 17	73779		TY DE	NVEF	2	STATE	СО	ZIP 80 2	217	2	NUMBER 20) 929			IELD AN	JRAL	BU	JTTE	ES	
4. LOCATION OF W AT SURFACE:			SL 686	6 FEL	S25, T	9S, R	21E	Ÿ	BHL	revi	ewe	d		OTR/OTE MERIDIA ESE	R, SECT N: 25			SHIP, RAN 21E	
AT TOP PRODU	CING INTERV	AL REPOR	RTED BE	LOW:	NESE 1	1889 I	FSL 10	09 FEL							20			Z I L	
AT TOTAL DEPT						_		E						COUNTY JINTA			1	13. STATE	UTAH
14. DATE SPUDDED)	1/21/2	011			1/2011	1 4 6		ABANDON	ED 🗌	READY T	O PRODU	CE 🗾		980 (F, RKB	, RT, GL):	
18. TOTAL DEPTH:	MD 9,6 TVD 9,5			19. PLUG	BACK T.D		9,606 9,5 5 3		20. IF I	MULTIPLE C	OMPLETIC	NS, HOW	MANY? *	21. DEF	PTH BR LUG SE		MD		
22. TYPE ELECTRIC				,	Submit cop	y of each)			23.	L CORED	,	NO	[7]	YES [7	(Culou	all and oi	-
SCBL/GR/C	CL-BHV-	-SD/DS	SN/A(CTR						WAS DST			NO NO	☑	YES YES	Ī	(Subr	mit analysis mit report) mit copy)	<i>•</i>)
24. CASING AND LI	NER RECORD) (Report a	all string	s set in w	eii)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			1					120		(000)	т сору ј	
HOLE SIZE	SIZE/GRA	DE	WEIGHT	(#/ft.)	TOP (MD)	вотто	OM (MD)		EMENTER EPTH		TYPE & SACKS	SLU VOLUM	RRY E (BBL)	CEM	MENT T	TOP **	AMOUI	NT PULLED
20"	14"	STL	36.	7#			4	0				28			1			+-	
11"	8 5/8"	J-55	28	#			2,6	603				1,200			 	0		†	
7 7/8"	4 1/2"	1-80	11.	6#			9,6	649				1,500			1	138	0	1	
				· · · · · · · · · · · · · · · · · · ·				***************************************								***************************************			
														· · · · · · · · · · · · · · · · · · ·		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
																P-100-100-100-100-100-100-100-100-100-10		1	,
25. TUBING RECOF	₹Đ							,											
SIZE	DEPTH S	ET (MD)	PACK	ER SET (MD)	SIZE		DEPTH	SET (MD)	PACKE	R SET (MD)	SIZE		DEPTH	SET (I	MD)	PACKER	R SET (MD)
2 3/8"	8,9	41	<u></u>					<u> </u>											
26. PRODUCING IN		<u> </u>	-							27. PERFO				t distribution de					
FORMATION		TOP			OM (MD)	TOP	(TVD)	вотто	M (TVD)		L (Top/Bot		SIZE	NO. HO				ATION ST	ATUS
(A) MESAVE		7,4	1/6	9,	440					7,476	(9,440	0.36	16	1 0	Open	<u>V</u>	Squeezed	<u>'Ц</u>
(B) WSm	TAD			 							· ·				C	Open		Squeezed	<u>'</u>
(C)	,	ļ		ļ				ļ						***************************************	c	Open	Ц_	Squeezed	<u>'</u>
(D)		<u>L</u>		<u> </u>				ļ			·				- 0	Open	<u> </u>	Squeezed	
28. ACID, FRACTU		NT, CEME	NT SQU	EEZE, ET	C.			***************************************											
	NTERVAL	····			····					DUNT AND T				······································	-				
7476 - 9440	, 	·	PUN	/IP 11,	025 B	BLS S	SLICK	H20 8	<u> 419,</u>	284 LBS	SAN)		**********	~~~	WW.			
-	····	- , - , , , , , , , , , , , , , , , , , 										***************************************							
***************************************			<u>L</u>		····														
29. ENCLOSED AT	TACHMENTS:															30	. WELL	L STATUS	:
	RICAL/MECHA			CEMENT	VERIFICA	TION		GEOLOGI			DST REPO	RT 🔽	DIREC	TIONAL S		ŀ		PRO	D
1							<u> </u>			٬ لبسا	V 111L1V				RE	<u>Ç</u> I	ΞΙ۷	<u>ED</u>	
(5/2000)							(CO	NTINUE	D ON E	BACK)					MA	Y 1	0 2	2011	

(CONTINUED ON BACK)

31	IMITIAL	PROD	LICTION

INTERVAL A (As shown in item #26)

3/24/2011		3/30/	(2011		HOURS TESTE	D: 24	RATES:		OIL - BBL:	GAS - MCF: 3,712	WATER - BBL:	PROD. METHOD: FLOWING
20/64	TBG. PRES 1,99	E .		RAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PROD RATES: →		OIL - BBL:	GAS - MCF: 3,712	WATER - BBL: 604	INTERVAL STATUS: PROD
					. INT	TERVAL B (As sho	wn in item #26	5)				
DATE FIRST PR	ODUCED:	TEST D	ATE:		HOURS TESTE	D:	TEST PRODI		OIL BBL:	GAS MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	SS. CSG. PF	ESS. API C	RAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PROD RATES: →		OIL BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:
			······································		IN	TERVAL C (As sho	wn in item #26	i)	·!			
DATE FIRST PR	ODUCED:	TEST DA	NTE:		HOURS TESTE	D:	TEST PRODU		OIL - BBL:	GAS - MCF:	WATER BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	SS. CSG. PF	ESS. API (RAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PROD RATES: -		OIL - BBL:	GAS - MCF:	WATER BBL:	INTERVAL STATUS:
***************************************			L		INT	TERVAL D (As sho	wn in item #26	3)		<u> </u>		
DATE FIRST PR	ODUCED:	TEST DA	NTE:		HOURS TESTE	D:	TEST PRODU		OIL - BBL:	GAS - MCF:	WATER BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	SS. CSG. PF	ESS. APIG	RAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PROD RATES: →		OIL - BBL:	GAS - MCF:	WATER BBL:	INTERVAL STATUS:
32. DISPOSITIO	ON OF GAS (Sold, Used for	Fuel, Vented, E	itc.)								<u> </u>
33. SUMMARY	OF POROUS	ZONES (includ	le Aquifers):					34	. FORMATION	(Log) MARKERS:	~~~~	
Show all importa tested, cushion u						m tests, including de	pth interval					
Formation	on	Top (MD)	Bottom (MD)		Descrip	otions, Contents, etc	:.			Name	(Top Measured Depth)
GREEN R BIRD'S NE MAHOGA WASATCI MESAVER	EST NY H	1,432 1,765 2,181 4,775 7,435	7,435 9,659	TD			,					
9659'. details	report Attac indiv	ed at sched is vidual f	559' or the ch	n Sun ronole ages.	ogical we	ell histo	ry and	fina	l surve	uld have by. Complet		
36. I hereby cer	rtify that the	foregoing and	attached Infon	nation is c	omplete and corr	ect as determined	from all availa	ible reco	rds.			
NAME (PLEAS	SE PRINT)	NDREW	LYTLE		······································		_ TITLE .	REG	ULATORY	ANALYST		
SIGNATURE	/5		0				DATE	4/27/	2011			

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Operation Summary Report

Well: NBU 921-25I4AS GREEN	Spud Conductor: 11/17/2010	Spud Date: 11/27/2010
Project: UTAH-UINTAH	Site: NBU 921-25i PAD	Rig Name No: H&P 311/311, PROPETRO/
Event: DRILLING	Start Date: 11/13/2010	End Date: 1/23/2011

Active Datum: F _evel)	RKB @5,005.00ft	(above Mean	Sea	UWI: N	E/SE/0	/9/S/21/E/:	25/0/0/26/PM/S/2045/E/0/686/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
11/27/2010	6:30 - 7:30	1.00	MIRU	01	С	Р	MOVE RIG IN OFF NBU 921-2512AS
	7:30 - 8:30	1.00	MIRU	01	В	Р	RIG UP
	8:30 - 9:00	0.50	DRLSUR	06	Α	Р	P/U 1.50 DEG BENT HOUSING HUNTING MTR SN 8064 . 7/8 LOBE .16 RPM. M/U Q506 SN 7023548 3RD RUN, W/ 6-18'S. INSTALL RUBBER.
	9:00 - 11:00	2.00	DRLSUR	02	Α	Р	SPUD SURFACE 11-27-2010 @ 09:00 HRS. DRILL 11" SURFACE HOLE F/40'-200' (160' @ 80'/HR) PSI ON/ OFF 690/410, UP/ DOWN/ ROT 27/22/25. 532 GPM, 45 RPM ON TOP DRIVE, 15-18K WOB
	11:00 - 13:00	2.00	DRLSUR	06	Α	Р	TOOH, PU AND ORIENT DIR TOOLS, TIH T/200'
	13:00 - 17:30	4.50	DRLSUR	02	D	P	DRILL/ SLIDE 11" SURFACE HOLE F/200'-650' (450' 100'/HR) PSI ON/ OFF 1100/800, UP/ DOWN/ ROT 54/49/51. 130 SPM 18-20K WOB,532 GPM, 45 RPM ON TOP DRIVE.MM 85 RPM,CIRC. RESERVE PIT
	17:30 - 0:00	6.50	DRLSUR	02	D	Р	DRILL/ SLIDE 11" SURFACE HOLE F/650'-1420' (770' 118'/HR) PSI ON/ OFF 1350/1220, UP/ DOWN/ ROT 65/56/60. 130 SPM 18-20K WOB,532 GPM, 45 RPM ON TOP DRIVE.MM 85 RPM,(LOST CIRC @ 1640',RUN AIR AS NEEDED TO MAINTAIN RESERVE PIT LEVEL)
11/28/2010	0:00 - 6:00	6.00	DRLSUR	. 02	D	Р	DRILL/ SLIDE 11" SURFACE HOLE F/1420'-1800' (380' 63'/HR) PSI ON/ OFF 1600/1400, UP/ DOWN/ ROT 78/62/69. 130 SPM 18-20K WOB,532 GPM, 45 RPM ON TOP DRIVE.MM 85 RPM,(LOST CIRC @ 1640',RUN AIR AS NEEDED TO MAINTAIN RESERVE PIT LEVEL)
	6:00 - 21:00	15.00	DRLSUR	02	D	Р	DRILL/ SLIDE 11" SURFACE HOLE F/1800'-2600' (800' 53'/HR) PSI ON/ OFF 1700/1450, UP/ DOWN/ ROT 83/74/79. 130 SPM 18-20K WOB,532 GPM, 45 RPM ON TOP DRIVE.MM 85 RPM,(LOST CIRC @ 1640',RUN AIR AS NEEDED TO MAINTAIN RESERVE PIT LEVEL)TD 11" SURF. HOLE @ 21:00
	21:00 - 22:30	1.50	DRLSUR	05	С	Р	CIRC & COND HOLE F/L/D & 8 5/8" SURF. CSG
	22:30 - 0:00	1.50	DRLSUR	06	D	Р	L/D DRILL STRING
11/29/2010	0:00 - 4:00	4.00	DRLSUR	06	D	P	CONT. T/L/D DRILL STRING, DIR. TOOLS & 11"BHA
	4:00 - 5:00	1.00	DRLSUR	12	Α	Р	RIG UP T/RUN 8 5/8" 28# SURF. CSG
	5:00 - 8:30	3.50	DRLSUR	12	С	P	HOLD SAFTEY MEETING RUN SHOE,SHOE JNT & 57 JNTS J-55 8 5/8" 28# LT&C CSG W/THE SHOE @2582' & THE BAFFEL @ 2536'
	8:30 - 9:00	0.50	DRLSUR	12	В	P	HOLD SAFTEY MEETING R/U PRO PETRO CEMENTERS
	9:00 - 10:00	1.00	DRLSUR	12	E	P	HOLD SAFETY MEETING. INSTALL CEMENT HEAD. PSI TEST TO 2000 PSI. PUMP 140 BBLS OF 8.3# H20 AHEAD. NO CIRC. PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. NO CIRC. PUMP 350 SX (72 BBLS) OF 15.8# 1.15 YIELD TAIL(2% CALC, 1/4# /SK OF FLOCELE). NO CIRC. DROP PLUG ON FLY AND DISPLACE W/154 BBLS OF 8.3# H20. NO RETURNS, BUMP PLUG AND HOLD 750 PSI FOR 5 MIN. FLOAT HELD(FINAL LIFT PRESS 400 PSI)
	10:00 - 10:30	0.50	DRLSUR	12	F	P	TOP OUT W/100 SKS CLASS"G" 15.8 PPG CEMENT W/1.15/CUFT/SK YIELD W/4% CACL2,NO CEMENT TO SURF
	10:30 - 12:00	1.50	DRLSUR	13	Α	Р	WAIT ON CEMENT

Operation Summary Report

Well: NBU 921-2	514AS	GREEN		Spud C	onductor	: 11/17/2	010	Spud Date: 11/27/2010						
Project: UTAH-U	INTAH	l		Site: NB	NBU 921-25I PAD Rig Name No: H&P 311/311, PROPETRO/									
Event: DRILLING)			Start Da	ite: 11/13	3/2010		End Date: 1/23/2011						
Active Datum: Ri Level)	<b @5<="" th=""><th>,005.00ft (a</th><th>bove Mear</th><th>Sea</th><th>UWI: N</th><th>IE/SE/0/9</th><th>/S/21/E/2</th><th>25/0/0/26/PM/S/2045/E/0/686/0/0</th>	,005.00ft (a	bove Mear	Sea	UWI: N	IE/SE/0/9	/S/21/E/2	25/0/0/26/PM/S/2045/E/0/686/0/0						
Date	Sta	Time irt-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)						
		- 12:30 - 14:30	0.50 2.00	DRLSUR	12 13	F	P P	TOP OUT W/125 SKS CLASS"G" 15.8 PPG CEMENT W/1.15/CUFT/SK YIELD W/4% CACL2,NO CEMENT TO SURF						
		- 14:30	0.00	DRLSUR	12	F	P	WAIT ON CEMENT TOP OUT W/100 SKS CLASS"G" 15.8 PPG CEMENT W/1,15/CUFT/SK YIELD W/4% CACL2,NO						
		- 16:30	2.00	DRLSUR	13	Α	P	CEMENT TO SURF WAIT ON CEMENT						
		- 17:00	0.50	DRLSUR	12	F	P	TOP OUT W/125 SKS CLASS"G" 15.8 PPG CEMENT W/1.15/CUFT/SK YIELD W/4% CACL2,NO CEMENT TO SURF						
		- 18:30 - 19:00	1.50	DRLSUR	13	Α -	P	WAIT ON CEMENT						
			0.50	DRLSUR	12	F	P	TOP OUT W/100 SKS CLASS"G" 15.8 PPG CEMENT W/1.15/CUFT/SK YIELD W/4% CACL2,NO CEMENT TO SURF						
		- 20:30 - 21:00	1.50	DRLSUR	13	A	P	WAIT ON CEMENT						
			0.50	DRLSUR	12	F	P	TOP OUT W/150 SKS CLASS"G" 15.8 PPG CEMENT W/1.15/CUFT/SK YIELD W/4% CACL2,NO CEMENT TO SURF						
		- 23:00	2.00	DRLSUR	13	A	P	WAIT ON CEMENT						
		- 0:00	1.00	DRLSUR	12	F	P	TOP OUT W/150 SKS CLASS"G" 15.8 PPG CEMENT W/1.15/CUFT/SK YIELD W/4% CACL2,GOOD CEMENT TO SURF. STAYED @ SURF,RELEASE RIG @ 23:59 11/29/2010						
	23:30	- 23:30	0.00	DRLSUR				CONDUCTOR CASING: Cond. Depth set: 40' Cement sx used: 28						
								SPUD DATE/TIME: 11/27/2010 9:00						
4/44/0044	8,00		4.00					SURFACE HOLE: Surface From depth: 40' Surface To depth: 2,600 Total SURFACE hours: 34.00 Surface Casing size: 8.625" # of casing joints ran: 58 Casing set MD: 2,582.0 # sx of cement: 350/850 Cement blend (ppg:) 15.8/15.8 Cement yield (ft3/sk): 1.15/1.15 # of bbls to surface: 3 Describe cement issues: NONE Describe hole issues: NONE						
1/14/2011		- 9:00	1.00	PRPSPD	01	C .	P	SKID RIG FROM NBU 921-2512AS						
		- 10:00 - 15:00	1.00	PRPSPD	14	A	P	NU BOPE						
		- 15:00	5.00	PRPSPD	15	A	Р	TESTED BOPE. PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINE, & KILL LINE VALVES, BOP WING VALVES, HCR VALVE, CHOKE LINE INNER & OUTER CHOKE VALVES, & MANIFOLD 250 PSI LOW/ 5 MINUTES, 5K HIGH FOR 10 MINUTES, TEST ANNULAR 250 LOW/5 MINUTES, 2500 HIGH/10 MINUTES, TEST SUPER CHOKE. FUNCTION TEST CLOSING UNIT.						
		- 17:00 - 18:00	2.00	PRPSPD	15	A	P	PRESSURE TESTED SURFACE CASING TO 1500 PSI FOR 30 MINUTES. FILLED CHOKE LONE AND MANIFOLD WITH METHANOL.						
		- 18:00 - 18:30	1.00	PRPSPD	15	A	P	RIGGED DOWN BOPE TESTER.						
		- 18:30 - 19:00	0.50	PRPSPD	14	В	P	INSTALLED WEAR BUSHING						
		- 19:00	0.50	PRPSPD	07	A	Р	RIG SERVICE.						

Operation Summary Report

Well: NBU 921	-25I4AS	GREEN		Spud Co	onductor	: 11/17/2	010	Spud Date: 11/27/2010						
Project: UTAH-	UINTAF	4		Site: NB	Rig Name No: H&P 311/311, PROPETRO									
Event: DRILLIN	1G	***************************************		Start Da	te: 11/13	3/2010		End Date: 1/23/2011						
Active Datum: Level)	RKB @5	5,005.00ft (a	bove Mean	Sea	UWI: N	E/SE/0/9	/S/21/E/	25/0/0/26/PM/S/2045/E/0/686/0/0						
Date	Sta	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)						
	21:30	- 21:30 - 23:00	2.50 1.50	PRPSPD DRLPRO	01 06	А	P	COMPLETE RIG UP. INSTALLED FLOWLINE, INSTALLED TURNBUCKLES. MU HUGHES 7.875", Q506F W/6-15'S, SERIAL #7131527, SDI HIGH SPEED, 1.5 DEGREE BEND MOTOR, 0.23 REV/GAL. PICKED UP AND INSTALLED E-FIELD TOOL AND DIRECTIONAL TOOLS. SCRIBED TOOLS.						
		- 0:00	1.00	DRLPRO	06	Α	P	TRIP IN THE HOLE.						
1/15/2011		- 1:30	1.50	DRLPRO	06	Α	P	CONTINUED TO TRIP IN THE HOLE.						
		- 2:00	0.50	DRLPRO	06	Α	Р	INSTALLED ROTATING HEAD RUBBER.						
		- 3:00	1.00	DRLPRO	02	F	Р	DRILLED BAFFLE PLATE, SHOE JOINT AND SHOE.						
	3:00	- 6:00	3.00	DRLPRO	02	D	P	DRILLED 2621'-3049', 428' IN 3 HRS, 142.7 FPH. MADE 3 SLIDES, 55' TOTAL FEET IN A TOTAL OF 60 MINUTES. WOB WAS 15-18K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 50 RPM FOR A TOTAL OF 154 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 300-400 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 1400/1000 PSI. ON/OFF BOTTOM TORQUE WAS 8/4K. PU/SO/ROT WAS 108/94/98. CIRCULATING THE RESERVE PIT.						
		- 17:30 - 18:00	11.50 0.50	DRLPRO	02	D	P	WOB DID NOT EXCEED 18,000 LBS. DRILLED 3049'-4401', 1352' IN 11.5 HRS, 117.6 FPH. MADE 7 SLIDES, 124 TOTAL FEET IN 2 HRS AND 10 MINUTES. WOB WAS 15-18K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 50 RPM FOR A TOTAL OF 154 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 350-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 1750/1320 PSI. ON/OFF BOTTOM TORQUE WAS 8/5K. PU/SO/ROT WAS 130/105/118. CIRCULATING THE RESERVE PIT. WOB DID NOT EXCEED 18,000 LBS. RIG SERVICE.						
		- 0:00	6.00	DRLPRO	02	D	P	DRILLED 4401'-5233', 832' IN 6 HRS, 138.6 FPH.						
1/16/2011		- 2:30	2.50	2	02	D	P	100% ROTATING. WOB WAS 15-18K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 50 RPM FOR A TOTAL OF 154 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 275-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 1800/1400 PSI. ON/OFF BOTTOM TORQUE WAS 10/5K. PU/SO/ROT WAS 150/132/114. CIRCULATING THE RESERVE PIT. WOB DID NOT EXCEED 18,000 LBS. DRILLED 5233'-5578', 345' IN 2.5 HRS, 138 FPH.						
			ant of U		V 2		•	100% ROTATING. WOB WAS 15-18K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 50 RPM FOR A TOTAL OF 154 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 275-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 1800/1400 PSI. ON/OFF BOTTOM TORQUE WAS 10/5K. PU/SO/ROT WAS 152/134/115. CIRCULATING THE RESERVE PIT. WOB DID NOT EXCEED 18,000 LBS.						
	2:30	- 3:30	1.00	DRLPRO	05	В	Р	LOST ALL RETURNS, PUMPED 2 80 BBL LCM SWEEPS. REGAINED FULL RETURNS.						

Operation Summary Report

Well: NBU 921		REEN		,		nductor: 11/17/2010 Spud Date: 11/27/2010 921-25 PAD Rig Name No: H&P 311/311 PRO							
Project: UTAH-	-UINTAH			Site: NB	U 921-2	51 PAD			Rig Name No: H&P 311/311, PROPETRO/ End Date: 1/23/2011				
Event: DRILLIN			······································		te: 11/13	/2010							
Active Datum: Level)	RKB @5,0	05.00ft (a	bove Mean	Sea	UWI: N	E/SE/0/9	/S/21/E	E/25/0/0/26/PM/S/	2045/E/0/686/0/0				
Date	Start	ne -End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation				
	6:00 -		2.50	DRLPRO	02	D	P		DRILLED 5578'-5911', 333' IN 2.5 HRS, 133.2 FPH. 100% ROTATING. WOB WAS 15-18K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 50 RPM FOR A TOTAL OF 154 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 275-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 1850/1400 PSI. ON/OFF BOTTOM TORQUE WAS 10/5K. PU/SO/ROT WAS 155/135/118. CIRCULATING THE RESERVE PIT. WOB DID NOT EXCEED 18,000 LBS. DRILLED 5911'-6697', 786' IN 11.5 HRS, 68.3 FPH. MADE 1 SLIDE, 20' IN 40 MINUTES. WOB WAS 15-20K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 50 RPM FOR A TOTAL OF 154 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 275-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2000/1700 PSI. ON/OFF BOTTOM TORQUE WAS 8/6K. PU/SO/ROT WAS 179/138/157. INCREASED MAXIMUM WOB TO 19K AT 6100' AND TO 20K AT 6602'. BIT IS HAVING A HARD TIME MAKING HOLE, VERY RATTY DRILLING. MUDDED UP AT 6240', DISPLACE THE HOLE VOLUME AND MUD PITS WITH FRESH WATER. AS SOON AS WE MUDDED UP WE STARTED LOSING FLUID, INCREASED LCM % TO 13%, NEVER LOST FULL RETURNS. LOST 180 BBLS. 9.3 PPG, 32 VIS WITH 13% LCM.				
	17:30 -	18:00	0.50	DRLPRO	07	Α	Р		RIG SERVICE.				
	18:00 -	0:00	6.00	DRLPRO	02	D	P		DRILLED 6697'-6924', 227' IN 6 HRS, 37.8 FPH. MADE 2 SLIDES, 25' IN 1 HOUR AND 12' IN 30 MINUTES TOTAL FOOTAGE SLIDE WAS 37' IN 1.5 HRS. WOB WAS 15-22K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 50 RPM FOR A TOTAL OF 154 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 180-350 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2080/1800 PSI. ON/OFF BOTTOM TORQUE WAS 7/8K. PU/SO/ROT WAS 180/148/161. INCREASED MAXIMUM WOB TO 22K AT 6700'. INCREASED MW TO 9.6 PPG, 37 VIS WITH 13% LCM. HAVING ABOUT 90% RETURNS, CONSTANTLY LOSING FLUID, INCREASING LCM CONTENT.				
1/17/2011	0:00 -	6:00	6.00	DRLPRO	02	D	Р		DRILLED 6924'-7231', 307' IN 6 HRS, 51.2 FPH. 100% ROTATING. WOB WAS 15-22K, PUMP #1 AT 110 SPM, 495 GPM, MOTOR TURNING AT 114 RPM WITH TOP DRIVE AT 50 RPM FOR A TOTAL OF 154 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 180-300 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2100/1900 PSI. ON/OFF BOTTOM TORQUE WAS 7/8K. PU/SO/ROT WAS 185/153/166. INCREASED MW TO 10.2 PPG, 37 VIS WITH 16% LCM. HAVING ABOUT 90% RETURNS, CONSTANTLY LOSING FLUID, INCREASING LCM CONTENT.				

Operation Summary Report

	1-25I4AS GREEN		Spud Co				Spud Date: 1	·
Project: UTAH			Site: NB					Rig Name No: H&P 311/311, PROPETRO/
Event: DRILLI			Start Da	,				End Date: 1/23/2011
Level)	RKB @5,005.00ft (above Mear	Sea	UWI: N	E/SE/0/9	9/S/21/E/2	:5/0/0/26/PM/S	i/2045/E/0/686/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	6:00 - 16:30	10.50	DRLPRO	02	D	P		DRILLED 7231'-7703', 472' IN 10.5 HRS, 45 FPH. MADE 1 SLIDE-45' IN 45 MINUTES. WOB WAS 15-25K, PUMP #1 AT 88 SPM, 396 GPM, MOTOR TURNING AT 91 RPM WITH TOP DRIVE AT 40 RPM FOR A TOTAL OF 131 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 150-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2000/1520 PSI. ON/OFF BOTTOM TORQUE WAS 7/6K. PU/SO/ROT WAS 199/150/170. INCREASED MW TO 10.5 PPG, 37 VIS WITH 18% LCM. STARTED USING THESE PARAMETERS AT THE TOP OF THE MESA VERDE AT 7442'. INCREASEI MAXIMUM WOB TO 25K AT 7300' DUE TO VERY SLOW ROP.
	16:30 - 19:00	2.50	DRLPRO	80	В	Z		TOP DRIVE REPAIR TO THE OIL COOLERS.
4400000	19:00 - 0:00	5.00	DRLPRO	02	D	P		DRILLED 7703'-7848', 145' IN 5 HRS, 29 FPH. MADE 1 SLIDE, 22' IN 2.5 HRS. WOB WAS 15-25K PUMP #1 AT 88 SPM, 396 GPM, MOTOR TURNING AT 91 RPM WITH TOP DRIVE AT 40 RPM FOR A TOTAL OF 131 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 200-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2000/1600 PSI. ON/OFF BOTTOM TORQUE WAS 10/6K. PU/SO/ROT WAS 205/145/172. SLOWLY INCREASED MW TO 10.8 PPG, 37 VIS WITH 18% LCM. LOSING A SMALL AMOUNT OF FLUID.
1/18/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILLED 7848'-8103', 255' IN 6 HRS, 42.5 FPH. 100% ROTATING. WOB WAS 15-25K, PUMP #1 AT 88 SPM, 396 GPM, MOTOR TURNING AT 91 RPM WITH TOP DRIVE AT 40 RPM FOR A TOTAL OF 131 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 200-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2000/1600 PSI. ON/OFF BOTTOM TORQUE WAS 10/6K. PU/SO/ROT WAS 205/145/172. SLOWLY INCREASED MW TO 11.2 PPG, 37 VIS WITH 18% LCM. LOST 150 BBLS WHILE DRILLING THIS INTERVAL, CONSTANTLY ADDING LCM.
	6:00 - 13:30	7.50	DRLPRO	02	D	Р		DRILLED 8103'-8372', 269' IN 7.5 HRS, 35.9 FPH. MADE 2 SLIDES-25' IN 2 HRS AND 25' IN 1HOUR. TOTAL SLIDE TIME/FOOTAGE WAS 50' IN 3 HOURS OR 16.7 FPH. WOB WAS 20-25K, PUMP #1 AT 88 SPM, 396 GPM, MOTOR TURNING AT 91 RPM WITH TOP DRIVE AT 40 RPM FOR A TOTAL OF 131 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 200-500 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2100/1680 PSI. ON/OFF BOTTOM TORQUE WAS 10/6K. PU/SO/ROT WAS 206/150/178. SLOWLY INCREASED MW TO 11.6 PPG, 37 VIS WITH 20% LCM. SLIGHT LOSSES, CONSTANTLY ADDING LCM. LOST 150 BBLS.
	13:30 - 16:30	3.00	DRLPRO	05	В	P		STARTED LOSING RETURNS LOST 20 BBLS, PULLED 5 STANDS AND BUILT/PUMPED 2 32% LCM SWEEPS, GOT RETURNS BACK AND STAGED BACK IN THE HOLE. LOST A TOTAL OF 100 BBLS.

Operation Summary Report

Well: NBU 921	-25I4AS	GREEN		Spud Co	onductor	: 11/17/20	010	Spud Date: 11	1/27/2010
Project: UTAH	-UINTA	+		Site: NB	U 921-2	51 PAD			Rig Name No: H&P 311/311, PROPETRO/
Event: DRILLI	٧G			Start Dat	te: 11/13	/2010			End Date: 1/23/2011
Active Datum: Level)	RKB @	5,005.00ft ((above Mean	Sea	UWI: N	E/SE/0/9	/S/21/E	/25/0/0/26/PM/S	5/2045/E/0/686/0/0
Date	Sta	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/19/2011		- 0:00 - 5:30	7.50 5.50	DRLPRO	02	D	P		DRILLED 8372'-8677', 305' IN 7.5 HRS, 40.7 FPH. 100% ROTATING. STILL LOSING FLUID, COULD NOT GET TO 86 SPM WITHOUT LOSING FLUID. ADDING LCM AND INCREASING STROKES AND WOB VERY SLOWLY. WOB WAS 20-25K, PUMP #1 AT 85 SPM, 382 GPM, MOTOR TURNING AT 88 RPM WITH TOP DRIVE AT 40 RPM FOR A TOTAL OF 128 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 250-450 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2250/1900 PSI. ON/OFF BOTTOM TORQUE WAS 19/6K. PU/SO/ROT WAS 214/152/179. MAINTAINING MW AT 11.7 PPG, 42 VIS WITH 22% LCM. VERY SLIGHT LOSSES, CONSTANTLY ADDING LCM.
	5:20				-				100% ROTATING. WOB WAS 20-25K, PUMP #1 AT 85 SPM, 382 GPM, MOTOR TURNING AT 88 RPM WITH TOP DRIVE AT 40 RPM FOR A TOTAL OF 128 RPM AT THE BIT. DIFFERENTIAL PRESSURE WAS 250-450 PSI. ON/OFF BOTTOM PUMP PRESSURE WAS 2250/1900 PSI. ON/OFF BOTTOM TORQUE WAS 19/6K. PU/SO/ROT WAS 214/152/179. INCREASING MW TO 11.8 PPG, 42 VIS WITH 22% LCM. VERY SLIGHT LOSSES, CONSTANTLY ADDING LCM.
		- 6:00	0.50	DRLPRO	07	A	P		RIG SERVICE.
	6:00	- 8:00	2.00	DRLPRO	02	D	P		DRILLED-8913 TO 8962', 49', 24.5 ROP. 100% ROTATING. WOB- 20-25K, PUMP #1, 85 SPM, 382 GPM, MOTOR RPM- 88 RPM, TOP DRIVE - 40 RPM, BIT 128 RPM. DIFF- 250-450 PSI. ON/OFF BOTTOM SPP- 2250/1900 PSI. ON/OFF BOTTOM TORQUE -19/6K. PU/SO/ROT WAS 214/152/179. INCREASING MW TO 11.8 PPG, 42 VIS WITH 22% LCM. VERY SLIGHT LOSSES, CONSTANTLY ADDING LCM.
	8:00	- 9:30	1.50	DRLPRO	05	С	P		CIRCULATE HOLE CLEAN
	9:30	- 10:00	0.50	DRLPRO	06	Α	Р		FLOW CHECK, NO FLOW
	10:00	- 18:00	8.00	DRLPRO	06	Α	Р		TRIP FOR NEW BIT
	18:00	- 18:30	0.50	DRLPRO	07	Α	Ρ		LUBRICATE RIG
	18:30	- 19:30	1.00	DRLPRO	06	Α	P		PU BIT & BHA
	19:30	- 0:00	4.50	DRLPRO	06	Α	Р		TRIP IN HOLE W/ NEW BIT
1/20/2011	0:00	- 1:30	1.50	DRLPRO	06	Α	Р		TRIP IN HOLE W/ NEW BIT
	1:30	- 8:30	7.00	DRLPRO	02	D	P		DRILLED-8962 TO 9323',361',51 ROP. 100% ROTATING. 25' FLARE AT BOTTOMS UP, WOB-20-25K, PUMP #1, 85 SPM, 382 GPM, MOTOR RPM-88 RPM, TOP DRIVE - 40 RPM, BIT 128 RPM. DIFF-250-450 PSI. ON/OFF BOTTOM SPP-2250/1900 PSI. ON/OFF BOTTOM TORQUE -19/6K. PU/SO/ROT WAS 216/153/180. TOOK A 25 BBLS GAIN ON CONNECTION, 20' FLARE, HELD PUMP RATE, INCREASING MW TO 12.0 PPG, 42 VIS WITH 24% LCM, LOST CIRCULATION

4/27/2011

2:21:17PM

Operation Summary Report

Project: UTAH	-UINTAH		Site: NB	U 921-2	5I PAD		Spud Date: 11/27/2010 Rig Name No: H&P 311/311, PROPETRO/
Event: DRILLII			Start Da			1	End Date: 1/23/2011
	RKB @5,005.00ft (above Mear		T		9/S/21/E	:/25/0/0/26/PM/S/2045/E/0/686/0/0
Level)	· ·						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
	8:30 - 21:30	13.00	DRLPRO	05	В	х	PU OFF BOTTOM, THROTTLE PUMPS BACK TO 30 SPM, MIX LCM SWEEP & PUMP AROUND, RAISE LCM TO 27%, REGAIN CIRCULATION, GET BACK ON THE PUMPS, TAKE 23 BBLS GAIN, CIRCULATE OUT GAS, STAY ON THE PUMPS MAINTAINING ECD, CONTINUE TO RAISE MW TO 12.0 TO DEAL WITH THE GAS INFLOW. CONTINUE TO LOSE MUD, LOST TOTAL RETURNS 16:00, MW 12.1, VIS 40, LCM-30%, CONTINUE TO MIX MUD & LCM, BUILDING VOLUME, PUMPING AT 30 STROKES, REGAINED CIRCULATION, MW 12.1, VIS-40, 25% LCM, PH IN 10.5, PH OUT-8.4, CO2 ENTRY OCCURING ALSO. CONTINUE TO BUILD VOLUME & CONDITION MUD, MW 12.1, VIS 39, LCM-30%, PH IN/OUT- 10.5, STAGE UP & RESUME DRILLING LOST 600 BBLS MUD LAST 13 HOURS
	21:30 - 0:00	2.50	DRLPRO	02	В	P	DRILLED-9323' TO 9343, 120',48 ROP. 100% ROTATING., WOB- 20-25K, PUMP #1, 90 SPM, 405 GPM, MOTOR RPM- 57 RPM, TOP DRIVE - 40 RPM, BIT 97 RPM. DIFF- 300-450 PSI. ON/OFF BOTTOM SPP- 2292/2050 PSI. ON/OFF BOTTOM TORQUE -19/6K. PU/SO/ROT WAS 218/154/187. MW 12.1 PPG, 39 VIS WITH 30% LCM, PH IN/OUT-10.5, LOST 60 BBLS MUD
1/21/2011	0:00 - 7:00	7.00	DRLPRO	02	В	P	DRILLED- 9443 TO 9659, 217, ', ROP. 100% ROTATING.TD AT 07:00, WOB- 20-25K, PUMP #1, 90 SPM, 405 GPM, MOTOR RPM- 57 RPM, TOP DRIVE - 40 RPM, BIT 97 RPM. DIFF- 300-450 PSI. ON/OFF BOTTOM SPP- 2292/2050 PSI. ON/OFF BOTTOM TORQUE -19/6K. PU/SO/ROT WAS 218/154/187. MW 12.2 PPG, 39 VIS WITH 30% LCM, PH IN/OUT-10.5, NO MUD LOST
	7:00 - 10:00	3.00	DRLPRO	05	F	P	PUMP HI VIS SWEEP, CIRC 2 BOTTOMS UP,FLOW CHECK, WELL HAD FLOW
	10:00 - 12:30	2.50	DRLPRO	05	В	Р	CONTINUE CIRCULATING, INCREASE MW TO 12.4, FLOW CHECK, NO FLOW
	12:30 - 21:00	8.50	DRLPRO	06	E	Р	WIPER TRIP TO SHOE, STARTED PARTIAL SWABBING OFF BOTTOM, CONTINUE TRIP SLOWLY FILLING DP & BREAKING CIRCULATION EVERY 5 STANDS OUT
	21:00 - 21:30	0.50	DRLPRO	07	Α	Р	LUBRICATE RIG
	21:30 - 0:00	2.50	DRLPRO	06	E _	P	WIPER TRIP IN SLOWLY TO AVOID SURGING LOST CIRC ZONE.
1/22/2011	0:00 - 3:00	3.00	DRLPRO	06	Е	Р	WIPER TRIP
	3:00 - 4:30	1.50	DRLPRO	05	F	P	CIRCULATE 2 BOTTOMS UP, DROP SURVEY
	4:30 - 11:30	7.00	DRLPRO	06	Α	P	HOLD JSA, TRIP FOR LOGS
	11:30 - 17:30	6.00	DRLPRO	11	D	Р	HOLD JSA, RU LOGGERS, RUN TRIPLE COMBO, LOGGERS DEPTH 9654
	17:30 - 18:30	1.00	DRLPRO	11	D	Р	HOLD JSA, RD LOGGERS
	18:30 - 21:00	2.50	DRLPRO	12	Α	Р	HOLD JSA, RU CASERS
	21:00 - 0:00	3.00	DRLPRO	12	С	P	HOLD JSA, RUN 4 1/2, I-80, 11.6# BTC CSG
1/23/2011	0:00 - 4:00	4.00	DRLPRO	12	С	Р	RUN 230 JTS 4 1/2, I-80, 11.6#, BTC CASING, SHOE LANDED AT 9649, FLOAT COLLAR AT 9605 MV MARKER AT 7331, WASATCH MARKER AT4740.
	4:00 - 5:00	1.00	DRLPRO	12	Α	Р	HOLD JSA, RD CASERS, CIRC OUT TRIP GAS, 20' FLARE AT BOTTOMS UP.
	5:00 - 6:30	1.50	DRLPRO	12	E	Ρ	HOLD JSA, RU CEMENTERS

4/27/2011

2:21:17PM

Operation Summary Report

Well: NBU 921-	-25I4AS	GREEN		Spud Co	onductor	r: 11/17/2	2010	Spud Date: 11/27/2010		
Project: UTAH-	UINTAL	1		Site: NB	U 921-2	5I PAD		Rig Name No: H&P 311/311, PROPETRO/		
Event: DRILLING Start Da					te: 11/13	3/2010		End Date: 1/23/2011		
Active Datum: RKB @5,005.00ft (above Mean Sea Level)					UWI: NE/SE/0/9/S/21/E/25/0/0/26/PM/S/2045/E/0/686/0/0					
Date		Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)		
	6:30	- 9:00	2.50	DRLPRO	12	E	P	PUMP 40 BBLS WATER SPACER, 500 SX, 176 BBLS, 1.98 YIELD 12.5# LEAD, 1000 SX, 223 BBLS, 1.25 YIELD, 14.3# TAIL, DISPLACE W/ 149 BBLS TREATED WATER, BUMP PLUG, FLOATS HELD, RETURNED 0 BBLS CMT TO SURFACE, FINAL LIFT 2770 PSI		
		- 11:00	2.00	DRLPRO	12	В	P	HOLD JSA, RD HALLIBURTON		
		- 11:30	0.50	DRLPRO	01	E	P	BLOW DOWN MUD SYSTEM TO TANKS		
		- 12:30	1.00	DRLPRO	01	E	P	CLEAN PITS, RD FLOWLINES		
	12:30	- 13:30	1.00	DRLPRO	01	Ε	Р	ND BOP		
	13:30	- 15:00	1.50	DRLPRO	01	Ε	P	SET C-22 CSG SLIPS IN 110K, CUT OFF CSG		
	15:00	- 15:30	0.50	DRLPRO	01	E	P	LD CUT CSG, PULL ROTATING HEAD		
	15:30	- 16:00	0.50	DRLPRO	01	E	Р	CO ELEVATORS		
	16:00	- 17:30	1.50	DRLPRO	01	Е	Р	SLIP & CUT DRILL LINE		
		- 18:00	0.50	DRLPRO	01	E	P	PREP RIG TO SKID, RELEASE RIG		

4/27/2011

2:21:17PM

Operation Summary Report

Well: NBU 921-25I4AS GREEN	Spud C	onductor	: 11/17/	2010	Spud Da	ate: 11/27/2010				
Project: UTAH-UINTAH	Site: NE	BU 921-2	5I PAD			Rig Name No: H&P 311/311, PROPETRO/				
Event: DRILLING	Start Da	ite: 11/13	3/2010			End Date: 1/23/2011				
Active Datum: RKB @5,005.00ft (above Me Level)	an Sea	UWI: N	UWI: NE/SE/0/9/S/21/E/25/0/0/26/PM/S/2045/E/0/686/0/0							
Date Time Duration Start-End (hr)		Code	Sub Code	P/U	MD Fro					
있습니다. 그 전 100 100 100 100 100 100 100 100 100 1	DRLPRO					CONDUCTOR CASING: Cond. Depth set: 40 Cement sx used: 28 SPUD DATE/TIME: 11/27/2010 21:00 SURFACE HOLE: 11 Surface From depth: 40 Surface To depth: 2,600 Total SURFACE hours: 34.00 Surface Casing size: 8 5/8 # of casing joints ran: 58 Casing set MD: 2,582.0 # sx of cement: 350+850 Cement blend (ppg:) 15.8 Cement yield (ft3/sk): 1.15 # of bbls to surface: 3 Describe cement issues: NONE Describe hole issues: NONE PRODUCTION: 7.875 Rig Move/Skid start date/time: 1/14/2011 8:00 Rig Move/Skid finish date/time: 1/14/2011 9:00 Total MOVE hours: 1.0 Prod Rig Spud date/time: 1/15/2011 2:00 Rig Release date/time: 1/23/2011 18:00 Total SPUD to RR hours: 208.0 Planned depth MD 9,688 Planned depth TVD 9,615 Actual MD: 9,659 Actual TVD: 9,596 Open Wells \$: \$939,063 AFE \$: \$765,863 Open wells \$/ft: \$97.22				
						PRODUCTION HOLE: 7.875 Prod. From depth: 2,621 Prod. To depth: 9,659 Total PROD hours: 109.5 Log Depth: 9654 Float Collar Top Depth: 9605 Production Casing size: 4 1/2 # of casing joints ran: 230 Casing set MD: 9,649.0 # sx of cement: 500 LEAD, 1000 TAIL Cement blend (ppg:) 12.5 LEAD, 14.3 TAIL Cement yield (ft3/sk): LEAD 1.98, TAIL 1.25 Est. TOC (Lead & Tail) or 2 Stage: LEAD 1700, TAIL 4289 Describe cement issues: NONE Describe hole issues: NONE DIRECTIONAL INFO: KOP: 158 Max angle: 13.90 Departure: 608.00 Max dogleg MD: 3.83				

US ROCKIES REGION **Operation Summary Report** Well: NBU 921-25I4AS GREEN Spud Conductor: 11/17/2010 Spud Date: 11/27/2010 Project: UTAH-UINTAH Site: NBU 921-251 PAD Rig Name No: GWS 1/1 Event: COMPLETION Start Date: 3/15/2011 End Date: 3/24/2011 UWI: NE/SE/0/9/S/21/E/25/0/0/26/PM/S/2045/E/0/686/0/0 Active Datum: RKB @5.005.00ft (above Mean Sea Level) Date Time Duration Phase Sub P/U MD From Code Operation Start-End (hr) Code (ft) 7:00 - 15:00 P 3/15/2011 8.00 COMP 37 В PSI TEST PROD AND SURF CSG AS PER PROCEDURE. GOOD TEST. PERF STG 1) PU 3 3/8" EXP GUN 23 GM 0.36 HOLE 90 AND 120 DEGREE PHASING. RIH PERF FROM: 9438-40. 3 SPF. 6 HOLES 9338-40. 3 SPF. 6 HOLES 9234-36. 3 SPF. 6 HOLES 9212-13. 4 SPF. 4 HOLES. 22 HOLES TOTAL POOH. SWFN 3/17/2011 COMP 36 В FRAC STG 1) WHP 1635 PSI, BRK 3522 PSI @ 4.7 BPM. ISIP 2523 PSI, FG .71. PUMP 100 BBLS @ 47.1 BPM @ 5502 PSI = 95% HOLES OPEN. ISIP 2770 PSI, FG .74, NPI 247 PSI. MP 6376 PSI, MR 50.7 BPM, AP 5491 PSI, AR 45.2 PMP 786 BBLS SW & 16,640 LBS OF 30/50 SND & 4,671 LBS OF 20/40 SLC SND. TOTAL PROP 21.311 LBS. SWI. X OVER TO WIRELINE PERF STG 2) PU 4 1/2" 8 K HAL CBP AND 3 3/8" EXP GUNS 23 GM 0.36 HOLE SIZE. 90 AND 120 DEGREE PHASING. RIH AND SET CBP AT 9173 PERF FROM: 9142-43. 4 SPF. 4 HOLES 9090-92. 3 SPF. 6 HOLES 9049-50. 4 SPF. 4 HOLES 9002-03. 4 SPF. 4 HOLES 8971-72. 4 SPF. 4 HOLES. 22 HOLES POOH. SWIFN. 3/18/2011 6:45 - 7:00 0.25 COMP Р 48 HSM. SIME OPS

US ROCKIES REGION **Operation Summary Report** Spud Conductor: 11/17/2010 Spud Date: 11/27/2010 Well: NBU 921-25I4AS GREEN Project: UTAH-UINTAH Site: NBU 921-251 PAD Rig Name No: GWS 1/1 **Event: COMPLETION** Start Date: 3/15/2011 End Date: 3/24/2011 Active Datum: RKB @5,005.00ft (above Mean Sea UWI: NE/SE/0/9/S/21/E/25/0/0/26/PM/S/2045/E/0/686/0/0 Level) P/U MD From Time Duration Phase Code Sub Operation Date Start-End (hr) Code (ft) 7:00 - 18:00 COMP P FRAC STG 2)WHP 1851 PSI, BRK 3086 PSI @ 4.2 36 В 11.00 BPM. ISIP 2180 PSI, FG .68. PUMP 100 BBLS @ 49.5 BPM @ 5770 PSI = 86% HOLES OPEN. ISIP 3088 PSI, FG .78, NPI 908 PSI. MP 6685 PSI, MR 52.2 BPM, AP 5635 PSI, AR 48.5 врм, PMP 2491 BBLS SW & 95,027 LBS OF 30/50 SND & 4796 LBS OF 20/40 SLC SND. TOTAL PROP 99,823 LBS. SWI, X-OVER FOR WL PERF STG 3)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8899' P/U PERF F/ 8868'-69', 4 SPF, 4 HOLES. 8831'-33', 3 SPF, 6 HOLES. 8796'-97', 4 SPF, 4 HOLES. 8760'-62', 3 SPF, 6 HOLES. 8714'-15', 4 SPF, 4 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW. FRAC STG 3)WHP 2137 PSI, BRK 2908 PSI @ 4.7 BPM. ISIP 2327 PSI, FG .70. PUMP 100 BBLS @ 49.9 BPM @ 6091 PSI = 75% HOLES OPEN. ISIP 2719 PSI, FG .75, NPI 392 PSI. MP 6672 PSI, MR 51.3 BPM, AP 5276 PSI, AR 49.6 BPM. PMP 2590 BBLS SW & 90,168 LBS OF 30/50 SND & 4,816 LBS OF 20/40 SLC SND. TOTAL PROP 94,984 LBS. SWI, X-OVER FOR WL. PERF STG 4)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8630' P/U PERF F/ 8598'-00', 4 SPF, 8 HOLES. 8537'-39', 3 SPF, 6 HOLES. 8517'-18', 4 SPF, 4 HOLES. 8329'-31', 3 SPF, 6 HOLES. 24 HOLES. FRAC STG 4)WHP 1694 PSI, BRK 3051 PSI @ 4.7 BPM. ISIP 1802 PSI, FG .65. PUMP 100 BBLS @ 39.8 BPM @ 6365 PSI = 60% HOLES OPEN. ISIP 2477 PSI, FG .73, NPI 675 PSI. MP 6645 PSI, MR 52.4 BPM, AP 6192 PSI, AR 47 вРМ, PMP 911 BBLS SW & 29,290 LBS OF 30/50 SND & 4945 LBS OF 20/40 SLC SND. TOTAL PROP 34,235 LBS. SWI, X-OVER FOR WL. PERF STG 5)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8279' P/U PERF F/ 8244'-45', 4 SPF, 4 HOLES. 8164'-65', 4 SPF, 4 HOLES. 8132'-33', 4 SPF, 4 HOLES. 8114'-15', 3 SPF, 3 HOLES. 8074'-75', 4 SPF, 4 HOLES. 8054'-55', 4 SPF, 4 HOLES. 23 HOLES. POOH, SWIFN. 6:30 - 6:45 Р 3/19/2011 0.25 COMP 48 HSM.

4/29/2011 1:51:08PM 2

Operation Summary Report

Well: NBU 921	I-25I4AS GREEN		Spud C	onductor	: 11/17/2	010	Spud Date: 11/27/2010
Project: UTAH	-UINTAH		Site: NB	U 921-2	5I PAD		Rig Name No: GWS 1/1
Event: COMPL	ETION		Start Da	te: 3/15/	2011		End Date: 3/24/2011
Active Datum: Level)	RKB @5,005.00ft (above Mean	Sea	UWI: N	E/SE/0/9	9/S/21/E	E/25/0/0/26/PM/S/2045/E/0/686/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
	7:15 - 16:30	9.25	COMP	31	ı	Р	RD OFF NBU 921-25i4DS, MIRU, ND WH, NU BOP, INSTAL CAGE OVER WH ON 25i4DS, RU FLOOR & TBG EQUIP, SPOT TBG TRAILER, TALLY & PU TBG TO 7,365', RU POWER SWIVEL, OPEN DOORS & CHECK RAM BLOCKS & RUBBERS ON BTM PIPE RAMS RUBBER WORN ON TOP & BTM OF RUBBER, WILL REPLACE AFTER THIS HOLE, PRESS TEST TO 3,000 PSI DOOR SEAL LEAKING, OPEN DOOR CHECK SEAL HAD A LITTLE SAND BEHIND IT, MAKE UP DOOR, PRESS TEST TO 3,000 PSI HELD OKAY, READY FOR D/O IN AM, SWI, SDFN.
3/24/2011	7:00 - 7:15	0.25	COMP	48		Р	HSM, SLIPS, TRIPS & FALLS, D/O PLUGS & LANDING TBG.

4/29/2011

1:51:08PM

Operation Summary Report

Well: NBU 921-25I4AS GREEN	Spud Co	onductor: 11/17/2	2010	Spud Date: 11/27/2010
Project: UTAH-UINTAH	Site: NB	U 921-25I PAD		Rig Name No: GWS 1/1
Event: COMPLETION	Start Da	te: 3/15/2011		End Date: 3/24/2011
Active Datum: RKB @5,005.00ft (above Mean Level)	Sea		9/S/21/E	E/25/0/0/26/PM/S/2045/E/0/686/0/0
Date Time Duration Start-End (hr)	Phase	Code Sub Code	P/U	MD From Operation (ft)
7:15 - 17:00 9.75	COMP	44 C	Р	OPEN WELL UP, BREAK CIRC, START DRLG PLUGS. ALL SURFACE CSG VAVLES OPEN TO ATMOSPHERE W/ LOCKS ON THEM.
				C/O 25' SAND, TAG 1ST PLUG @ 7,426' DRL PLUG IN 7 MIN. 500 PSI INCREASE RIH, CSG PRESS 0 PSI.
				C/O 30' SAND, TAG 2ND PLUG @ 7,761' DRL PLUG IN 6 MIN. 300 PSI INCREASE RIH, CSG PRESS 50 PSI.
				SURFACE CSG STARTED BURPPING A LITTLE LOOKED LIKE DRLG MUD THEN TURNED TO WATER.
				C/O 20' SAND, TAG 3RD PLUG @ 8,035' DRL PLUG IN 10 MIN. 400 PSI INCREASE RIH, CSG PRESS 100 PSI.
				C/O 60' SAND, TAG 4TH PLUG @ 8,279' DRL PLUG IN 14 MIN. 200 PSI INCREASE RIH, CSG PRESS 250 PSI.
				C/O 25' SAND, TAG 5TH PLUG @ 8,630' DRL PLUG IN 12 MIN. 400 PSI INCREASE RIH, CSG PRESS 250 PSI. FLOWLINE PLUGGED W/ PLUG PARTS.
·.				C/O 20' SAND, TAG 6TH PLUG @ 8,899' DRL PLUG IN 12 MIN. 200 PSI INCREASE RIH, CSG PRESS 500 PSI.
				CRACK IN 3 1/2" X 2 3/8" XO ON BTM OF POWER SWIVEL HAD TO C/O.
				C/O 40' SAND, TAG 7TH PLUG @ 9,174' DRL PLUG IN 10 MIN. 400 PSI INCREASE RIH, CSG PRESS 600 PSI.
				PBTD 9,609', BTM PERF @ 9,440', TAGGED @ 9,530', 90' PAST BTM PERF, W/ 301 JTS 2 3/8" L-80 TBG, LD 19 JTS, PU & STRIP IN TBG HANGER & LAND TBG W/ 282 JTS 2 3/8" L-80, EOT 8,941.18'. SURFACE CSG QUIT BURPPING AFTER TBG WAS LANDED.
				RD POWER SWIVEL, FLOOR & TBG EQUIP, ND BOPS, NU WH, DROP BALL TO SHEAR OFF TO SHEAR OFF BIT W/ 3,200 PSI, LET BIT FALL FOR 20 MIN.
				TURN OVER TO FLOW BACK CREW. RD & MOVE TO NBU 921-2512AS, SDFN.
				KB= 25' 4 1/16" WEATHERFORD HANGER= .83' TBG DELIVERED 315 JTS
				282 JTS 2 3/8" L-80 = 8,913.15' TBG USED 282 JTS POBS= 2.20' TBG
				RETURNED 33 JTS EOT @ 8,941.18' SN @ 8,938.98'
				TWTR= 10,928 BBLS TWR= 1,600 BBLS

4/29/2011 1:51:08PM

Operation Summary Report

Well: NBU 921	-25I4AS GREEN		Spud Co	onductor	: 11/17/	2010	Spud Date: 11/27/2010
Project: UTAH	roject: UTAH-UINTAH Site: NB				51 PAD		Rig Name No: GWS 1/1
Event: COMPL	Event: COMPLETION Start Date						End Date: 3/24/2011
Active Datum: Level)	RKB @5,005.00ft (a	above Mean	Sea	UWI: N	E/SE/0	/9/S/21/E/2	/25/0/0/26/PM/S/2045/E/0/686/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
							TWLTR= 9,328 BBLS CALLED CDC TALKED TO BOBBY
	14:20 - 14:20	0.00	PROD	50			WELL TURNED TO SALES @ 1420 HR ON 3/24/11 1400 MCFD, 1920 BWPD, FTP 150, CP 2400#, CK 20/64"
3/30/2011	7:00 -			50			WELL IP'D ON 3/30/11 - 3712 MCFD, 0 BOPD, 604 BWPD, CP 3000#, FTP 1998#, CK 20/64", LP 148#, 24 HRS

4/29/2011 1:51:08PM 6



Site: NBU 921-251 Pad Well: NBU 921-2514AS

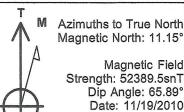
Wellbore: OH Design: OH



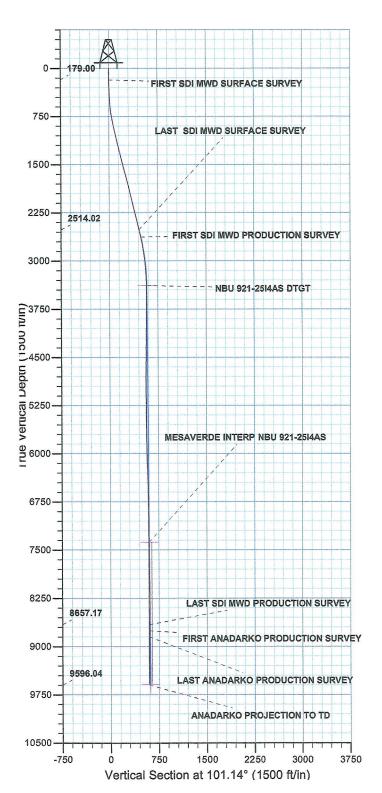
WELL DETAILS: NBU 921-25I4AS

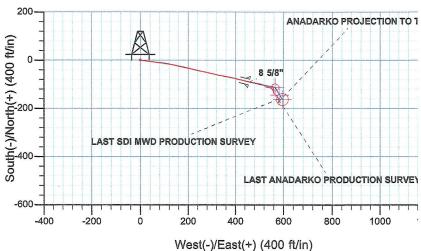
GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

+N/-S +E/-W Northing Easting Latittude Longitude
0.00 0.00 14531574.90 2062603.22 40° 0' 19.372 N 109° 29' 32.701 W



Model: IGRF2010





PROJECT DETAILS: Uintah County, UT UTM12

Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 - Western US
Ellipsoid: Clarke 1866
Zone: Zone 12N (114 W to 108 W)
Location: SEC 25 T9S R21E
System Datum: Mean Sea Level

Design: OH (NBU 921-2514AS/OH)

Constant Day Bahard Sante Dates 47:05 Enhances 04 904-



Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 921-25I Pad NBU 921-25I4AS

OH

Design: OH

Standard Survey Report

01 February, 2011





SDI

Survey Report



Company: Project:

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

Site: Well: NBU 921-25! Pad

NBU 921-25I4AS

Wellbore: Design:

OH OH

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-25I4AS

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

MD Reference:

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

North Reference:

Survey Calculation Method:

Minimum Curvature

True

Database:

Project

Uintah County, UT UTM12

Map System:

Universal Transverse Mercator (US Survey Feet)

EDM5000-RobertS-Local

System Datum:

Mean Sea Level

Geo Datum:

NAD 1927 - Western US

Map Zone:

Zone 12N (114 W to 108 W)

Site

Well

NBU 921-25I Pad, SEC 25 T9S R21E

Site Position:

Northing:

14,531,604.32 usft

Latitude:

40° 0' 19.663 N

From:

Lat/Long

Easting:

2.062.597.96 usft

Longitude:

Position Uncertainty:

0.00 ft

Slot Radius:

13.200 in

109° 29' 32.762 W

Grid Convergence:

0.97 °

NBU 921-25I4AS, 2064' FSL 689' FEL

Well Position

+N/-S +E/-W

0.00 ft

Northing:

14,531,574.90 usft

Latitude:

40° 0' 19.372 N

0.00 ft Easting: 2,062,603.22 usft

Longitude:

Position Uncertainty

0.00 ft

Wellhead Elevation:

Ground Level:

109° 29' 32.701 W

4,980.00 ft

Wellbore

ОН

Magnetics

Model Name

Sample Date

Declination

(°)

Dip Angle

(°)

Field Strength

(nT)

101.14

IGRF2010

11/19/2010

0.00

11.15

65.89

52,390

Design

Version:

Audit Notes:

OH 1.0

Phase:

ACTUAL

Tie On Depth:

0.00

0.00

Vertical Section:

Depth From (TVD)

+N/-S

0.00

+E/-W

Direction

(ft)

(ft)

(ft)

(°)

Date 02/01/2011

Survey Program From

To (ft) (ft)

Survey (Wellbore)

Tool Name

Description

21.00 2,679.00

8,815.00

2,566.00 Survey #1 SDI SURFACE MWD (OH) 8,720.00 Survey #2 SDI MWD PRODUCTION (OH) 9,659.00 Survey #3 ANADARKO SURVEY (OH)

MWD SDI MWD SDI

MWD

MWD - Standard ver 1.0.1 MWD - Standard ver 1.0.1

MWD - Standard

rey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.00	0.00	0.00	21.00	0.00	0.00	0.00	0.00	0.00	0.00
179.00	0.63	142.37	179.00	-0.69	0.53	0.65	0.40	0.40	0.00
FIRST SDI N	IWD SURFACE S	SURVEY							
263,00	1.62	100.32	262.98	-1.27	1.98	2.19	1.46	1.18	-50.06
347.00	2.43	88.10	346.93	-1.42	4.93	5.11	1.09	0.96	-14.55
431.00	2.84	91.55	430.84	-1.42	8.79	8.90	0.52	0.49	4.11
521.00	3.77	97.85	520.69	-1.88	13.95	14.05	1.11	1.03	7.00
611.00	5.60	99.53	610.38	-3.01	21.21	21.39	2.04	2.03	1.87



SDI Survey Report

TVD Reference:

MD Reference:



Company:

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT UTM12

Site: Well: NBU 921-25l Pad

Wellbore:

NBU 921-25I4AS

OH ОН Design:

Local Co-ordinate Reference:

Well NBU 921-25I4AS

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

Minimum Curvature

North Reference: True

Survey Calculation Method:

Database: EDM5000-RobertS-Local

Sur

еу										
	Measured			Vertical			Vertical	Dogleg	Build	Turn
	Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
	701.00	8.01	98.39	699.74	-4.66	31.75	32.05	2.68	2.68	-1.27
	791.00	10.11	95.87	788.62	-6.38	45.81	46.18	2.37	2.33	-2.80
	10,,,,,									
	881.00	11.80	97.90	876.97	-8.45	62.78	63.23	1.93	1.88	2.26
	971.00	12.91	98.10	964.89	-11.13	81.85	82.46	1.23	1.23	0.22
	1,061.00	13.98	97.25	1,052.42	-13.92	102.59	103.35	1.21	1.19	-0.94
	1,151.00	13.89	99.90	1,139.77	-17.15	124.02	125.00	0.72	-0.10	2.94
	1,241.00	14.07	102.94	1,227.11	-21.46	145.32	146.73	0.84	0.20	3.38
	1,331.00	14.17	102.57	1,314.39	-26.30	166.74	168.68	0.15	0.11	-0.41
	1,421.00	13.24	102.15	1,401.82	-30.87	187.56	189.99	1.04	-1.03	-0.47
	1,511.00	13.40	101.04	1,489.40	-35.04	207.87	210.73	0.34	0.18	-1.23
	1,601.00	14.04	102.75	1,576.84	-39.44	228.76	232.07	0.84	0.71	1.90
	1,691.00	15.16	101.76	1,663.93	-44,25	250.93	254.75	1.27	1.24	-1.10
	1,781.00	14.23	101.90	1,750.98	-48.93	273.27	277.58	1.03	-1.03	0.16
	1,871.00	13.49	104.00	1,838.36	-53.75	294.28	299.12	0.99	-0.82	2.33
	1,961.00	13.74	102.98	1,925.83	-58.69	314.88	320.29	0.39	0.28	-1.13
	2,051.00	14.13	101.71	2,013.19	-63.32	336.06	341.96	0.55	0.43	-1.41
	2,141.00	13.20	99.40	2,100.64	-67.23	356.95	363.22	1.20	-1.03	-2.57
	2,231.00	13.30	100.56	2,188.24	-70.81	377.27	383.84	0.32	0.11	1.29
	2,321.00	12.90	104.25	2,275.90	-75.18	397.18	404.22	1.03	-0.44	4.10
	2,411.00	13.48	103.13	2,363.53	-80.03	417.13	424.74	0.70	0.64	-1.24
	2,501.00	14.01	104.94	2,450.95	-85.22	437.88	446.09	0.76	0.59	2.01
	2,566.00	13.94	104.23	2,514.03	-89.18	453.07	461.76	0.28	-0.11	-1.09
	LAST SDIN	IWD SURFACE S	URVEY							
	2,679.00	12.75	98.67	2,623.98	-94.40	478.59	487.81	1.55	-1.05	-4.92
	•	WD PRODUCTION		, , , , , ,						
	2,773.00	10.64	97.00	2,716.02	-97.02	497.46	506.83	2.27	-2.24	-1.78
	2,868.00	9.23	116.60	2,809.62	-101.51	512.98	522.93	3.83	-1.48	20.63
	2,962.00	8.88	115.37	2,902.45	-107.99	526.28	537.23	0.43	-0.37	-1.31
	3,057.00	6.24	108.34	2,996.62	-112.76	537.81	549.46	2.94	-2.78	-7.40
	3,151.00	5.98	110.97	3,090.08	-116.12	547.23	559.35	0.41	-0.28	2.80
	3,246.00	3.78	114.75	3,184.73	-119.20	554.69	567.27	2.34	-2.32	3.98
	3,340.00	1.45	126.19	3,278.63	-121.20	558.47	571.36	2.53	-2.48	12.17
	3,434.00	0.35	123.72	3,372.62	-122.06	559.67	572.70	1.17	-1.17	-2.63
	3,529.00	0.70	161.69	3,467.61	-122.77	560.09	573.26	0.50	0.37	39.97
	3,623.00	0.70	182.34	3,561.60	-123.89	560.25	573.63	0.27	0.00	21.97
	3,718.00	0.70	14.03	3,656.60	-123.69	560.42	573.76	1.75	0.28	-177.17
	3,812.00	1.32	340.28	3,750.58	-121.90	560.25	573.24	0.79	0.37	-35.90
	3,907.00	0.62	321.56	3,845.57	-120.47	559.56	572.29	0.80	-0.74	-19.71
	4,001.00	0.79	215.30	3,939.57	-120.60	558.87	571.64	1.20	0.18	-113.04
	4,095.00	0.53	335.89	4,033.56	-120.73	558.31	571.12	1.23	-0.28	128.29
	4,190.00	2.99	355.22	4,128.51	-117.86	557.93	570.19	2.63	2.59	20.35
	4,284.00	2.73	350.30	4,222.39	-113.21	557.35	568.72	0.38	-0.28	-5.23
	4,379.00	1.49	327.19	4,317.33	-109.94	556.30	567.06	1.56	-1.31	-24.33
	4,473.00	1.41	313.39	4,411.30	-108.12	554.79	565.23	0.38	-0.09	-14.68



SDI Survey Report

MD Reference:



Company:

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT UTM12

Site: Well: NBU 921-25l Pad

Wellbore:

NBU 921-25I4AS ОН

ОН Design:

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-2514AS

Minimum Curvature

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

North Reference: True

Survey Calculation Method:

Database:

EDM5000-RobertS-Local

Survey										
	Measured			Vertical			Vertical	Dogleg	Build	Turn
	Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
				of energy of the first						10 mg (10 mg 10 mg (10
	4,567.00	0.97	305.74	4,505.28	-106.86	553.31	563.53	0.50	-0.47	-8.14
ļ	4,662.00	0.62	256.08	4,600.27	-106.51	552.16	562.33	0.78	-0.37	-52.27
	4,756.00	0.62	239.30	4,694.26	-106.90	551.22	561.49	0.19	0.00	-17.85
	4,850.00	0.62	204.93	4,788.26	-107.62	550.57	560.99	0.39	0.00	-36.56
	4,945.00	0.79	187.26	4,883.25	-108.73	550.27	560.91	0.29	0.18	-18.60
	5,039.00	0.62	219.06	4,977.25	-109.77	549.87	560.72	0.45	-0.18	33.83
	5,133.00	0.88	188.41	5,071.24	-110.88	549.45	560.52	0.50	0.28	-32.61
1	5,228.00	0.97	1 64 .41	5,166.23	-112.38	549.55	560.91	0.42	0.09	-25.26
	5,322.00	0.79	187.26	5,260.21	-113.79	549.69	561.31	0.42	-0.19	24.31
	5,417.00	1.06	141.91	5,355.20	-115.13	550.15	562.02	0.80	0.28	-47.74
	5,511.00	0.70	153.60	5,449.19	-116.33	550.94	563.03	0.43	-0.38	12.44
İ	5,605.00	1.49	129.34	5,543.17	-117.61	552.14	564.46	0.96	0.84	-25.81
	5,699.00	1.85	147.71	5,637.14	-119.67	553.89	566.58	0.68	0.38	19.54
1	5,793.00	1.58	157.64	5,731.09	-122.15	555.20	568.34	0.43	-0.29	10.56
	5,888.00	1.85	161.95	5,826.05	-124.82	556.17	569.81	0.31	0.28	4.54
	-,			,						
	5,982.00	1.56	159.38	5,920.01	-127.46	557.09	571.22	0.32	-0.31	-2.73
ŀ	6,077.00	1.67	167.14	6,014.97	-130.02	557.86	572.46	0.26	0.12	8.17
	6,171.00	1.76	168.89	6,108.93	-132.77	558.44	573.57	0.11	0.10	1.86
	6,265.00	2.46	134.35	6,202.87	-135.60	560.16	575.80	1.51	0.74	-36.74
	6,360.00	2.90	139.36	6,297.76	-138.85	563.18	579.39	0.52	0.46	5.27
	6,454.00	2.37	140.07	6,391.66	-142.14	565.98	582.77	0.56	-0.56	0.76
ł	6,548.00	2.60	136.27	6,485.58	-14 5.18	568.70	586.03	0.30	0.24	-4.04
	6,643.00	2.46	146.22	6,580.48	-148.43	571.32	589.23	0.48	-0.15	10.47
	6,737.00	0.79	116.16	6,674.44	-150.39	573.03	591.28	1.94	-1.78	-31.98
	6,831.00	0.35	287.99	6,768.44	-150.59	573.33	591.62	1.21	-0.47	182.80
	6,926.00	0.26	23.52	6,863.44	-150.30	573.14	591.38	0.48	-0.09	100.56
	7,020.00	0.35	118.97	6,957.44	-150.24	573.48	591.70	0.48	0.10	101.54
	7,115.00	0.77	163.18	7,052.44	-150.99	573.92	592.28	0.60	0.44	46.54
	7,209.00	0.79	166.70	7,146.43	-152.23	574.25	592.84	0.06	0.02	3.74
	7,304.00	1.06	166.52	7,241.42	-153.72	574.61	593.48	0.28	0.28	-0.19
	7,398.00	1.32	140.33	7,335.40	-155.40	575.50	594.68	0.63	0.28	-27.86
1	7,493.00	0.97	78.72	7,430.38	-156.09	576.99	596.27	1.27	-0.37	-64.85
1	7,587.00	0.79	103.50	7,524.37	-156.08	578.40	597.65	0.44	-0.19	26.36
	7,681.00	1.32	125.48	7,618.35	-156.86	579.91	599.29	0.70	0.56	23.38
	7,776.00	1.06	144.46	7,713.33	-158.21	581.31	600.92	0.49	-0.27	19.98
		A ===	400.00	7 007 00	450.04	E00.01	000.00	2.42	2.22	7.05
	7,870.00	0.70	136.99	7,807.32	-159.34 160.38	582.21	602.02	0.40	-0.38	-7.95 5.00
	7,965.00	0.79	141.74	7,902.31	-160.28 161.73	583.01 584.30	602.99	0.11	0.09	5.00
	8,059.00	1.49	139.89	7,996.29	-161.72 163.61	584.20	604.43	0.75 0.25	0.74	-1.97
-	8,153.00	1.32	151.58	8,090.27	-163.61	585.50	606.08	0.35	-0.18	12.44
	8,248.00	0.53	151.14	8,185.25	-164.95	586.23	607.06	0.83	-0.83	-0.46
	8,342.00	1.76	349.69	8,279.24	-163.92	586.19	606.81	2.41	1.31	-171.76
	8,437.00	1.14	320.68	8,374.21	-161.75	585.33	605.54	0.99	-0.65	-30.54
	8,531.00	0.70	314.16	8,468.20	-160.63	584.32	604.34	0.48	-0.47	-6.94



SDI Survey Report



Company:

Kerr McGee Oil and Gas Onshore LP

Project: Site: Uintah County, UT UTM12 NBU 921-25l Pad

NBU 921-2514AS

Well: Wellbore:

Design:

OH

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-25I4AS

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

MD Reference:

GL 4980' & RKB 25' @ 5005.00ft (H&P 311) True

North Reference:

Survey Calculation Method:

Database:

Minimum Curvature EDM5000-RobertS-Local

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
8,626.00	1.06	272.87	8,563.19	-160.18	583.03	602.99	0.74	0.38	-43.46
8,720.00	1.13	234.59	8,657.17	-160.67	581.40	601.49	0.77	0.07	-40.72
LAST SDI M	WD PRODUCTIO	N SURVEY							
8,815.00	0.53	202.56	8,752.16	-161.62	580.47	600.76	0.78	-0.63	-33.72
FIRST ANAL	ARKO PRODUC	TION SURVEY							
8,909.00	1.00	203.93	8,846.15	-162.77	579.97	600.49	0.50	0.50	1.46
LAST ANAD	ARKO PRODUC	TION SURVEY							
9,659,00	1.00	176.39	9,596.04	-175.28	577.73	600.71	0.06	0.00	-3.67

Design Annotations		eritaria de constituir e de como de constituir de constituir de constituir de constituir de constituir de cons La constituir de constituir		
Measured Depth (ft)	Vertical Depth (ft)	Local Coo +N/-S (ft)	rdinates +E/-W (ft)	Comment
179.0	0 179.00	-0.69	0.53	FIRST SDI MWD SURFACE SURVEY
2,566.0	0 2,514.03	-89.18	453.07	LAST SDI MWD SURFACE SURVEY
2,679.0	0 2,623.98	-94.40	478.59	FIRST SDI MWD PRODUCTION SURVEY
8,720.0	0 8,657.17	-160.67	581.40	LAST SDI MWD PRODUCTION SURVEY
8,815.0	0 8,752.16	-161.62	580.47	FIRST ANADARKO PRODUCTION SURVEY
8,909.0	0 8,846.15	-162.77	579.97	LAST ANADARKO PRODUCTION SURVEY
9,659.0	0 9,596.04	-175.28	577.73	ANADARKO PROJECTION TO TD

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Checked By:	Approved By:	Date:	
	, .p.,	mato.	
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Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 921-25I Pad NBU 921-25I4AS

OH

Design: OH

Survey Report - Geographic

01 February, 2011





SDI Survey Report - Geographic



Company:

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT UTM12

Site:

NBU 921-25i Pad

Well:

NBU 921-25I4AS

Wellbore: Design:

OH ОН

Local Co-ordinate Reference:

Well NBU 921-25I4AS

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

TVD Reference: MD Reference:

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

North Reference: True

Survey Calculation Method:

Minimum Curvature

Database:

EDM5000-RobertS-Local

Project

Map System:

Uintah County, UT UTM12

Universal Transverse Mercator (US Survey Feet)

System Datum:

Mean Sea Level

Geo Datum: Map Zone:

NAD 1927 - Western US Zone 12N (114 W to 108 W)

Site

NBU 921-25I Pad, SEC 25 T9S R21E

Site Position:

From:

Lat/Long

Northing: Easting:

14,531,604.32 usft 2,062,597.96 usft

Latitude:

Longitude:

40° 0' 19.663 N 109° 29' 32.762 W

0.97°

Position Uncertainty:

0.00 ft

Slot Radius:

13.200 in

Grid Convergence:

Well

NBU 921-25I4AS, 2064' FSL 689' FEL

Well Position +N/-S 0.00 ft

Northing:

14,531,574.90 usft 2,062,603.22 usft Latitude: Longitude: 40° 0' 19.372 N

Position Uncertainty

0.00 ft 0.00 ft Easting: Wellhead Elevation:

ft

Ground Level:

109° 29' 32.701 W

4,980.00 ft

Wellbore

OH

+E/-W

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

IGRF2010

11/19/2010

0.00

11.15

65.89

0.00

52,390

Design

OH

Audit Notes:

1.0 Version:

Phase:

ACTUAL

0.00

Tie On Depth:

Depth From (TVD)

02/01/2011

+N/-S

+E/-W

0.00

Direction

Vertical Section:

(ft)

(ft)

(°)

101.14

Survey Program

From (ft)

Τo

(ft)

Survey (Wellbore)

Date

Tool Name

Description

21.00 2,679.00

8,815.00

2,566.00 Survey #1 SDI SURFACE MWD (OH) 8,720.00 Survey #2 SDI MWD PRODUCTION (OH) 9,659.00 Survey #3 ANADARKO SURVEY (OH)

MWD SDI MWD SDI

MWD

MWD - Standard ver 1.0.1

MWD - Standard ver 1.0.1 MWD - Standard

Survey

,									
Measured			Vertical			Мар	Мар		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting		
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,531,574.90	2,062,603.22	40° 0' 19.372 N	109° 29' 32.701 W
21.00	0.00	0.00	21.00	0.00	0.00	14,531,574.90	2,062,603.22	40° 0' 19.372 N	109° 29' 32.701 W
179.00	0.63	142.37	179.00	-0.69	0.53	14,531,574.22	2,062,603.76	40° 0' 19.365 N	109° 29' 32.694 W
FIRST S	DI MWD SURI	FACE SURVE	Υ						
263.00	1.62	100.32	262.98	-1.27	1.98	14,531,573.67	2,062,605.22	40° 0' 19.359 N	109° 29' 32.676 W
347.00	2.43	88.10	346.93	-1.42	4.93	14,531,573.56	2,062,608.17	40° 0' 19.358 N	109° 29' 32.638 W
431.00	2.84	91.55	430.84	-1.42	8.79	14,531,573.63	2,062,612.03	40° 0' 19.358 N	109° 29' 32.588 W
521.00	3.77	97.85	520.69	-1.88	13.95	14,531,573.26	2,062,617.20	40° 0' 19.353 N	109° 29' 32.522 W
611.00	5.60	99.53	610.38	-3.01	21.21	14,531,572.25	2,062,624.48	40° 0' 19.342 N	109° 29' 32.429 W
701.00	8.01	98.39	699.74	-4.66	31.75	14,531,570.78	2,062,635.04	40° 0' 19.326 N	109° 29' 32,293 W



SDISurvey Report - Geographic

MD Reference:



Company: Project: Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

Site:

NBU 921-251 Pad

Well:

NBU 921-2514AS

Wellbore: OH
Design: OH

Local Co-ordinate Reference:

TVD Reference:

Well NBU 921-2514AS

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

North Reference: True

Survey Calculation Method:

Minimum Curvature

Database: EDM5000-RobertS-Local

ey					Same and				
Measured			Vertical			Мар	Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting		
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude	Longitude
791.00	10.11	95.87	788.62	-6.38	45.81	14,531,569.30	2,062,649.13	40° 0' 19.309 N	109° 29' 32.11
881.00	11.80	97.90	876.97	-8.45	62.78	14,531,567.51	2,062,666.14	40° 0' 19.288 N	109° 29' 31.89
971.00	12.91	98.10	964.89	-11.13	81.85	14,531,565.15	2,062,685.25	40° 0' 19.262 N	109° 29' 31.64
1,061.00	13.98	97.25	1,052.42	-13.92	102.59	14,531,562.72	2,062,706.03	40° 0' 19.234 N	109° 29' 31.38
1,151.00	13.89	99.90	1,139.77	-17.15	124.02	14,531,559.85	2,062,727.51	40° 0' 19.202 N	109° 29' 31.10
1,241.00	14.07	102.94	1,227.11	-21.46	145.32	14,531,555.91	2,062,748.88	40° 0' 19.160 N	109° 29' 30.83
1,331.00	14.17	102.57	1,314.39	-26.30	166.74	14,531,551.42	2,062,770.38	40° 0' 19.112 N	109° 29' 30.55
1,421.00	13.24	102.15	1,401.82	-30.87	187.56	14,531,547.21	2,062,770.38	40° 0' 19.066 N	109° 29' 30.29
		102.13	1,489.40	-35.04	207.87	14,531,543.39	2,062,811.66	40° 0' 19.025 N	109° 29' 30.02
1,511.00	13.40		•				· ·		
1,601.00	14.04	102.75	1,576.84	-39.44	228.76	14,531,539,33	2,062,832.61	40° 0' 18.982 N	109° 29' 29.76
1,691.00	15.16	101.76	1,663.93	-44.25	250.93	14,531,534.90	2,062,854.86	40° 0' 18.934 N	109° 29' 29.47
1,781.00	14.23	101.90	1,750.98	-48.93	273.27	14,531,530.60	2,062,877.28	40° 0' 18.888 N	109° 29' 29.18
1,871.00	13.49	104.00	1,838.36	-53.75	294.28	14,531,526.13	2,062,898.37	40° 0' 18.840 N	109° 29' 28.91
1,961.00	13.74	102.98	1,925.83	-58.69	314.88	14,531,521.54	2,062,919.05	40° 0' 18.791 N	109° 29' 28.65
2,051.00	14.13	101.71	2,013.19	-63.32	336.06	14,531,517.27	2,062,940.30	40° 0' 18.746 N	109° 29' 28.38
2,141.00	13.20	99.40	2,100.64	-67.23	356.95	14,531,513.72	2,062,961.26	40° 0' 18.707 N	109° 29' 28.11
2,231.00	13.30	100.56	2,188.24	-70.81	377.27	14,531,510.49	2,062,981.63	40° 0' 18.672 N	109° 29' 27.85
2,321.00	12.90	104.25	2,275.90	-75.18	397.18	14,531,506.45	2,063,001.61	40° 0' 18.628 N	109° 29' 27.59
2,411.00	13.48	103.13	2,363.53	-80.03	417.13	14,531,501.94	2,063,021.65	40° 0' 18.580 N	109° 29' 27.34
2,501.00	14.01	104.94	2,450.95	-85.22	437.88	14,531,497.10	2,063,042.47	40° 0' 18.529 N	109° 29' 27.07
2,566.00	13.94	104.23	2,514.03	-89.18	453.07	14,531,493.40	2,063,057.73	40° 0' 18.490 N	109° 29' 26.87
LAST S	DI MWD SURI	FACE SURVE	Y						
2,679.00	12.75	98.67	2,623.98	-94.40	478.59	14,531,488.61	2,063,083.34	40° 0' 18.438 N	109° 29' 26.55
FIRST S	DI MWD PROI	DUCTION SU	RVEY						
2,773.00	10.64	97.00	2,716.02	-97.02	497.46	14,531,486.31	2,063,102.25	40° 0' 18.413 N	109° 29' 26.30
2,868.00	9.23	116.60	2,809.62	-101.51	512.98	14,531,482.09	2,063,117.84	40° 0' 18.368 N	109° 29' 26.10
2,962.00	8.88	115.37	2,902.45	-107.99	526.28	14,531,475.83	2,063,131.25	40° 0' 18.304 N	109° 29' 25.93
3,057.00	6.24	108.34	2,996.62	-112.76	537.81	14,531,471.26	2,063,142.85	40° 0' 18.257 N	109° 29' 25.78
3,151.00	5.98	110.97	3,090.08	-116.12	547.23	14,531,468.06	2,063,152.33	40° 0' 18.224 N	109° 29' 25.66
3,246.00	3.78	114.75	3,184.73	-119.20	554.69	14,531,465.10	2,063,159.85	40° 0' 18,193 N	109° 29' 25.57
3,340.00	1.45	126.19	3,278.63	-121.20	558.47	14,531,463.17		40° 0' 18.174 N	109° 29' 25.52
3,434.00	0.35	123.72	3,372.62	-122.06	559.67	14,531,462.33		40° 0' 18.165 N	109° 29' 25.50
3,529.00	0.70	161.69	3,467.61	-122.77	560.09	14,531,461.62		40° 0' 18.158 N	109° 29' 25.50
3,623.00	0.70	182.34	3,561.60	-123.89	560.25	14,531,460.50		40° 0' 18.147 N	109° 29' 25.50
3,718.00	0.97	14.03	3,656.60	-123.69	560.42	14,531,460.71	2,063,165.65	40° 0' 18.149 N	109° 29' 25.49
3,812.00	1.32	340.28	3,750.58	-121.90	560.25	14,531,462.50		40° 0' 18.167 N	109° 29' 25.50
3,907.00	0.62	321.56	3,750.56	-121.90	559.56	14,531,463.92		40° 0' 18.181 N	109° 29' 25.50
4,001.00	0.62	215.30	3,939.57	-120.47	558.87	14,531,463.92		40° 0' 18.179 N	109° 29' 25.50 109° 29' 25.51
•					558.31				
4,095.00	0.53	335.89	4,033.56	-120.73		14,531,463.63		40° 0' 18.178 N	109° 29' 25.52
4,190.00		355.22	4,128.51	-117.86	557.93	14,531,466.50	2,063,163.06	40° 0' 18.207 N	109° 29' 25.53
4,284.00		350.30	4,222.39	-113.21	557.35	14,531,471.14		40° 0' 18,253 N	109° 29' 25.53
4,379.00		327.19	4,317.33	-109.94	556.30	14,531,474.39		40° 0' 18.285 N	109° 29' 25.55
4,473.00	1.41	313.39	4,411.30	-108.12	554.79	14,531,476.18	2,063,159.76	40° 0' 18.303 N	109° 29' 25.57
4,567.00		305.74	4,505.28	-106.86	553.31	14,531,477.42		40° 0' 18.315 N	109° 29' 25.59
4,662.00	0.62	256.08	4,600.27	-106.51	552.16	14,531,477.74	2,063,157.10	40° 0' 18.319 N	109° 29' 25.60
4,756.00	0.62		4,694.26	-106.90	551.22	14,531,477.34	2,063,156.17	40° 0' 18.315 N	109° 29' 25.61
4,850.00	0.62	204.93	4,788.26	-107.62	550.57	14,531,476.61	2,063,155.53	40° 0' 18.308 N	109° 29' 25.62
4,945.00	0.79	187.26	4,883.25	-108.73	550.27	14,531,475.49	2,063,155.25	40° 0' 18.297 N	109° 29' 25.62
5,039.00	0.62	219.06	4,977.25	-109.77	549.87	14,531,474.45	2,063,154.87	40° 0' 18.287 N	109° 29' 25.63
5,133.00	0.88	188.41	5,071.24	-110.88	549.45	14,531,473.33	2,063,154.46	40° 0' 18.276 N	109° 29' 25.63
5,228.00			5,166.23	-112.38	549.55	14,531,471.84		40° 0' 18,261 N	109° 29' 25.63
5,322.00		187.26	5,260.21	-113.79	549.69	14,531,470.43	2,063,154.75	40° 0' 18.247 N	109° 29' 25.63
5,417.00		141.91	5,355.20	-115.13	550.15	14,531,469.10	2,063,155.23	40° 0' 18.234 N	109° 29' 25.63
5,511.00		153.60	5,449.19	-116.33	550.94	14,531,467.91	2,063,156.04	40° 0' 18.222 N	109° 29' 25.62
5,605.00		129.34	5,543.17	-117.61	552.14	14,531,466.64		40° 0' 18.209 N	109° 29' 25.60



SDI Survey Report - Geographic

TVD Reference:

MD Reference:



Company: Project:

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

Site: Well: NBU 921-25i Pad NBU 921-25I4AS

Weltbore:

Local Co-ordinate Reference:

Well NBU 921-25I4AS

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

GL 4980' & RKB 25' @ 5005.00ft (H&P 311)

North Reference:

Survey Calculation Method:

Minimum Curvature

True

OH ОН Database: EDM5000-RobertS-Local Design:

Survey									
Measured			Vertical			Мар	Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting		
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude	Longitude
5,699.00	1.85	147.71	5,637.14	-119.67	553.89	14,531,464.62	2,063,159.06	40° 0' 18.189 N	109° 29' 25.582 W
5,793.00	1.58	157.64	5,731.09	-122.15	555.20	14,531,462.16	2,063,160.40	40° 0' 18.164 N	109° 29' 25.565 W
5,888.00	1.85	161.95	5,826.05	-124.82	556.17	14,531,459.51	2,063,161.42	40° 0' 18.138 N	109° 29' 25.553 W
5,982.00	1.56	159.38	5,920.01	-127.46	557.09	14,531,456.88	2,063,162.39	40° 0' 18.112 N	109° 29' 25.541 W
6,077.00	1.67	167.14	6,014.97	-130.02	557.86	14,531,454.33	2,063,163.19	40° 0' 18.086 N	109° 29' 25.531 W
6,171.00	1.76	168.89	6,108.93	-132.77	558.44	14,531,451.59	2,063,163.82	40° 0' 18.059 N	109° 29' 25.524 W
6,265.00	2.46	134.35	6,202.87	-135.60	560.16	14,531,448.80	2,063,165.59	40° 0' 18.031 N	109° 29' 25.502 W
6,360.00	2.90	139.36	6,297.76	-138.85	563.18	14,531,445.60	2,063,168.67	40° 0' 17.999 N	109° 29' 25.463 W
6,454.00	2.37	140.07	6,391.66	-142.14	565.98	14,531,442.35	2,063,171.52	40° 0' 17.967 N	109° 29' 25.427 W
6,548.00	2.60	136.27	6,485.58	-145.18	568.70	14,531,439.37	2,063,174.29	40° 0' 17.937 N	109° 29' 25.392 W
6,643.00	2.46	146.22	6,580.48	-148.43	571.32	14,531,436.16	2,063,176.97	40° 0' 17.904 N	109° 29' 25.358 W
6,737.00	0.79	116.16	6,674.44	-150.39	573.03	14,531,434.23	2,063,178.71	40° 0' 17.885 N	109° 29' 25.336 W
6,831.00	0.35	287.99	6,768.44	-150.59	573.33	14,531,434.04	2,063,179.02	40° 0' 17.883 N	109° 29' 25.332 W
6,926.00	0.26	23.52	6,863.44	-150.30	573.14	14,531,434.32	2,063,178.82	40° 0' 17.886 N	109° 29' 25.335 W
7,020.00	0.35	118.97	6,957.44	-150.24	573.48	14,531,434.38	2,063,179.16	40° 0' 17.886 N	109° 29' 25.330 W
7,115.00	0.77	163.18	7,052.44	-150.99	573.92	14,531,433.64	2,063,179.61	40° 0′ 17.879 N	109° 29' 25.325 W
7,209.00	0.79	166.70	7,146.43	-152.23	574.25	14,531,432.41	2,063,179.96	40° 0' 17.867 N	109° 29' 25.320 W
7,304.00	1.06	166.52	7,241.42	-153.72	574.61	14,531,430.92	2,063,180.34	40° 0' 17.852 N	109° 29' 25.316 W
7,398.00	1.32	140.33	7,335.40	-155.40	575.50	14,531,429.26	2,063,181.27	40° 0' 17.835 N	109° 29' 25.304 W
7,493.00	0.97	78.72	7,430.38	-156.09	576.99	14,531,428.60	2,063,182.76	40° 0' 17.829 N	109° 29' 25.285 W
7,587.00	0.79	103.50	7,524.37	-156.08	578.40	14,531,428.63	2,063,184.17	40° 0' 17.829 N	109° 29' 25.267 W
7,681.00	1.32	125.48	7,618.35	-156.86	579.91	14,531,427.87	2,063,185.70	40° 0' 17.821 N	109° 29' 25.248 W
7,776.00	1.06	144.46	7,713.33	-158.21	581.31	14,531,426.55	2,063,187.12	40° 0′ 17.808 N	109° 29' 25.230 W
7,870.00	0.70	136.99	7,807.32	-159.34	582.21	14,531,425.43	2,063,188.04	40° 0' 17.797 N	109° 29' 25.218 W
7,965.00	0.79	141.74	7,902.31	-160.28	583.01	14,531,424.51	2,063,188.86	40° 0' 17.787 N	109° 29' 25.208 W
8,059.00	1.49	139.89	7,996.29	-161.72	584.20	14,531,423.09	2,063,190.07	40° 0' 17.773 N	109° 29' 25.193 W
8,153.00	1.32	151.58	8,090.27	-163.61	585.50	14,531,421.22	2,063,191.40	40° 0′ 17.754 N	109° 29' 25.176 W
8,248.00	0.53	151.14	8,185.25	-164.95	586.23	14,531,419.89	2,063,192.16	40° 0' 17.741 N	109° 29' 25.166 W
8,342.00	1.76	349.69	8,279.24	-163.92	586.19	14,531,420.93	2,063,192.09	40° 0' 17.751 N	109° 29' 25.167 W
8,437.00	1.14	320.68	8,374.21	-161.75	585.33	14,531,423.08	2,063,191.20	40° 0' 17.773 N	109° 29' 25.178 W
8,531.00	0.70	314.16	8,468.20	-160.63	584.32	14,531,424.18	2,063,190.17	40° 0' 17.784 N	109° 29' 25.191 W
8,626.00	1.06	272.87	8,563.19	-160.18	583.03	14,531,424.61	2,063,188.87	40° 0' 17.788 N	109° 29' 25.208 W
8,720.00	1.13	234.59	8,657.17	-160.67	581.40	14,531,424.09	2,063,187.26	40° 0' 17.783 N	109° 29' 25.229 W
LAST SI	OI MWD PROD	DUCTION SU	RVEY						
8,815.00	0.53	202.56	8,752.16	-161.62	580.47	14,531,423.13	2,063,186.34	40° 0' 17.774 N	109° 29' 25.241 W
FIRST A	NADARKO PI	RODUCTION	SURVEY						
8,909.00		203.93	8,846.15	-162.77	579.97	14,531,421.97	2,063,185.86	40° 0' 17.763 N	109° 29' 25.247 W
LAST A	NADARKO PF	RODUCTION	SURVEY						
9,659.00	1.00	176.39	9,596.04	-175.28	577.73	14,531,409.42	2,063,183.83	40° 0' 17.639 N	109° 29' 25.276 W
ANADAI	RKO PROJEC	TION TO TD							

Design Annotation	ns				
	easured Depth (ft)	Vertical Depth (ft)	Local Coord +N/-S (ft)	inates +E/-W (ft)	Comment
	179.00	179.00	-0.69	0.53	FIRST SDI MWD SURFACE SURVEY
	2,566.00	2,514.03	-89.18	453.07	LAST SDI MWD SURFACE SURVEY

Checked By:	Approved By:	Date:	

STATE OF UTAH AMENDED REPORT FORM 8 DEPARTMENT OF NATURAL RESOURCES (highlight changes) DIVISION OF OIL, GAS AND MINING 5. LEASE DESIGNATION AND SERIAL NUMBER: **UO 0868 ST** 6. IF INDIAN, ALLOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG 1a. TYPE OF WELL: 7. UNIT or CA AGREEMENT NAME GAS VIELL OIL OTHER UTU63047A b. TYPE OF WORK: WELL NAME and NUMBER: NEW V DIFF. RESVR. RE-ENTRY NBU 921-2514AS OTHER 2. NAME OF OPERATOR: 9. API NUMBER: KERR MCGEE OIL & GAS ONSHORE, L.P. 4304751271 3. ADDRESS OF OPERATOR: 10 FIELD AND POOL, OR WILDCAT PHONE NUMBER: STATE CO ZIP 80217 (720) 929-6100 NATURAL BUTTES P.O.BOX 173779 CITY DENVER 4. LOCATION OF WELL (FOOTAGES) 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: AT SURFACE: NESE 2045 FSL 686 FEL S25, T9S, R21E NESE 25 9S 21E S AT TOP PRODUCING INTERVAL REPORTED BELOW: NESE 1889 FSL 109 FEL S25, T9S, R21E 12. COUNTY 13. STATE AT TOTAL DEPTH: NESE 1870 FSL 108 FEL S25, T9S, R21E **UTAH** UINTAH 14. DATE SPUDDED: 15. DATE T.D. REACHED: 16. DATE COMPLETED: 17. ELEVATIONS (DF, RKB, RT, GL): READY TO PRODUCE 🗸 ABANDONED 4980 GL 11/17/2010 1/21/2011 3/24/2011 18. TOTAL DEPTH: MD 9,659 19. PLUG BACK T.D.: MD 9,606 21. DEPTH BRIDGE 20. IF MULTIPLE COMPLETIONS, HOW MANY? * MD PLUG SET: TVD 9.596 TVD 9,553 22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) NO 🗸 WAS WELL CORED? YES (Submit analysis) SCBL/GR/CCL-BHV-SD/DSN/ACTR NO 🗸 YES WAS DST RUN? (Submit report) DIRECTIONAL SURVEY? NO YES 🗸 (Submit copy) 24. CASING AND LINER RECORD (Report all strings set in well) STAGE CEMENTER **CEMENT TYPE &** SLURRY HOLE SIZE BOTTOM (MD) CEMENT TOP ** AMOUNT PULLED SIZE/GRADE WEIGHT (#/ft.) TOP (MD) VOLUME (BBL) DEPTH NO OF SACKS 20" STL 36.7# 40 28 11" 28# 8 5/8' **IJ-55** 2.603 1,200 0 9,649 7 7/8" 1-80 11.6# 1380 4 1/2' 1,500 25. TUBING RECORD PACKER SET (MD) SIZE DEPTH SET (MD) SIZE DEPTH SET (MD) PACKER SET (MD) SIZE DEPTH SET (MD) PACKER SET (MD) 2 3/8" 8,941 26. PRODUCING INTERVALS 27. PERFORATION RECORD FORMATION NAME TOP (MD) BOTTOM (MD) TOP (TVD) BOTTOM (TVD) INTERVAL (Top/Bot - MD) SIZE NO. HOLES PERFORATION STATUS (A) MESAVERDE 7,476 9,440 7,476 9,440 0.36 161 Open Squeezed (B) Open Squeezed (C) Open (D) 28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL		AMOUN	T AND TYPE OF MATER	IAL	
7476 - 9440 F	PUM <mark>P 10,845</mark> BBLS SI	LICK H2O & 419,284	4 LBS SAND		
9. ENCLOSED ATTACHMENTS:					30. WELL STATUS:
ELECTRICAL/MECHANICAL LOGS SUNDRY NOTICE FOR PLUGGING		GEOLOGIC REPORT CORE ANALYSIS	DST REPORT OTHER:	✓ DIRECTIONAL SURVEY	PROD

(CONTINUED ON BACK)

AUG 2 9 2011

31	IMITIAL	PRODUCTION	ŧ

INTERVAL A (Ac shown in item #26)

• 11 11 11 1E 1 11 C												
DATE FIRST PR	ODUCED:	TEST DA			HOURS TESTED		TEST PRODUCTION		GAS - MCF:	WATER -		PROD. METHOD:
3/24/2011		3/30/	2011		2	24	RATES: →	0	3,712	60	4	FLOWING
CHOKE SIZE:	TBG. PRES			AVITY	BTU GAS	GAS/OIL RATIO	24 HR PRODUCTIO		GAS - MCF:	WATER -		INTERVAL STATUS:
20/64	1,998	3,00	00				RATES: →	0	3,712	60	4	PROD
					INTE	ERVAL B (As sho	wn in item #26)					
DATE FIRST PR	ODUCED:	TEST DA	TE:		HOURS TESTED) :	TEST PRODUCTION RATES: →	N OIL – BBL:	GAS - MCF:	WATER -	- BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	S. CSG. PR	ESS. API GR	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIO RATES: →	N OIL – BBL:	GAS - MCF:	WATER -	- BBL:	INTERVAL STATUS:
	Managara and a second				INTE	ERVAL C (As sho	wn in item #26)			make many and a second		
DATE FIRST PR	ODUCED:	TEST DA	TE:	***************************************	HOURS TESTED):	TEST PRODUCTION RATES: →	N OIL – BBL:	GAS – MCF:	WATER -	- BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	S. CSG. PR	ESS. API GF	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIO RATES: →	N OIL - BBL:	GAS – MCF:	WATER -	- BBL:	INTERVAL STATUS:
					INT	ERVAL D (As sho	wn in item #26)				-	
DATE FIRST PR	ODUCED:	TEST DA	TE:		HOURS TESTED):	TEST PRODUCTION RATES: →	N OIL – BBL:	GAS - MCF:	WATER -	- BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	S. CSG. PR	ESS. API GF	AVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTIO RATES: →	N OIL – BBL:	GAS MCF:	WATER -	- BBL:	INTERVAL STATUS:
32. DISPOSITIO	N OF GAS (S	Sold, Used for F	uel, Vented, Et	;.)					other conditions and the conditions are conditions and the conditions are conditions and the conditions are conditional are conditional are conditions are conditional are condi	revolución menuciana		
33. SUMMARY	OF POROUS	ZONES (Includ	e Aquifers):					34. FORMATION	(Log) MARKERS:			
Show all importa tested, cushion u					ls and all drill-stem recoveries.	tests, including de	epth interval					
Formation	on	Top (MD)	Bottom (MD)		Descript	tions, Contents, etc	3 .		Name		(1	Top Measured Depth)
GREEN R BIRD'S NE MAHOGA WASATCH MESAVER	EST NY H	1,432 1,765 2,181 4,775 7,435	7,435 9,659	TD								

35. ADDITIONAL REMARKS (Include plugging procedure)

TD was reported at 9559' on Sundry Notice dated 1/24/2011. TD should have been reported at 9659'. Attached is the chronological well history and final survey. Completion chrono details individual frac stages.

Amended # 28 on Completion Report. Attaching revised Completion Chrono.

36.	I hereby ce	rtify tha	t the fore	egoing and	attached	information	is complete	and correct	as determ	ined from al	available	e records

NAME (PLEASE PRINT) ANDREW LYTLE

REGULATORY ANALYST

SIGNATURE

8/23/2011

This report must be submitted within 30 days of

- completing or plugging a new well
- · drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- * ITEM 20: Show the number of completions if production is measured separately from two or more formations.
- ** ITEM 24: Cement Top Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

801-359-3940 Fax:

(5/2000)

US ROCKIES REGION Operation Summary Report Well: NBU 921-25I4AS GREEN Spud Conductor: 11/17/2010 Spud Date: 11/27/2010 Project: UTAH-UINTAH Site: NBU 921-25I PAD Rig Name No: GWS 1/1 **Event: COMPLETION** Start Date: 3/15/2011 End Date: 3/24/2011 Active Datum: RKB @5,005.00ft (above Mean Sea UWI: NE/SE/0/9/S/21/E/25/0/0/26/PM/S/2045/E/0/686/0/0 Level) Date Time Duration Phase Sub P/U MD From Code Operation Start-End (hr) Code (ft) 3/15/2011 7:00 - 15:00 8.00 COMP 37 В P PSI TEST PROD AND SURF CSG AS PER PROCEDURE. GOOD TEST. PERF STG 1) PU 3 3/8" EXP GUN 23 GM 0.36 HOLE 90 AND 120 DEGREE PHASING. RIH PERF 9438-40. 3 SPF. 6 HOLES 9338-40. 3 SPF. 6 HOLES 9234-36. 3 SPF. 6 HOLES 9212-13. 4 SPF. 4 HOLES. 22 HOLES TOTAL POOH. SWFN 3/17/2011 COMP В FRAC STG 1) WHP 1635 PSI, BRK 3522 PSI @ 4.7 36 BPM. ISIP 2523 PSI, FG .71. PUMP 100 BBLS @ 47.1 BPM @ 5502 PSI = 95% HOLES OPEN. ISIP 2770 PSI, FG .74, NPI 247 PSI. MP 6376 PSI, MR 50.7 BPM, AP 5491 PSI, AR 45.2 BPM, PMP 786 BBLS SW & 16.640 LBS OF 30/50 SND & 4,671 LBS OF 20/40 SLC SND. TOTAL PROP 21,311 LBS, SWI. X OVER TO WIRELINE PERF STG 2) PU 4 1/2" 8 K HAL CBP AND 3 3/8" EXP GUNS 23 GM 0.36 HOLE SIZE. 90 AND 120 DEGREE PHASING. RIH AND SET CBP AT 9173 PERF FROM: 9142-43. 4 SPF. 4 HOLES 9090-92. 3 SPF. 6 HOLES 9049-50. 4 SPF. 4 HOLES 9002-03. 4 SPF. 4 HOLES 8971-72, 4 SPF, 4 HOLES, 22 HOLES POOH. SWIFN. 3/18/2011 6:45 - 7:00 0.25 COMP 48 Ρ HSM. SIME OPS

Operation Summary Report

	-25I4AS GREEN				: 11/17/2			27/2010
roject: UTAH-	-UINTAH		Site: NB	U 921-2	5I PAD			Rig Name No: GWS 1/1
vent: COMPL	.ETION		Start Da	te: 3/15/	2011			End Date: 3/24/2011
ctive Datum: l evel)	RKB @5,005.00ft (above Mean	Sea	UWI: N	IE/SE/0/9	/S/21/E	/25/0/0/26/PM/S/	2045/E/0/686/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	 4. A. Martinette, A. S. Stein, Phys. Rev. B 56, 182 		COMP	36		P		FRAC STG 2)WHP 1851 PSI, BRK 3086 PSI @ 4.2 BPM. ISIP 2180 PSI, FG .68. PUMP 100 BBLS @ 49.5 BPM @ 5770 PSI = 86% HOLES OPEN. ISIP 3088 PSI, FG .78, NPI 908 PSI. MP 6685 PSI, MR 52.2 BPM, AP 5635 PSI, AR 48.5 BPM, PMP 2491 BBLS SW & 95,027 LBS OF 30/50 SND 4796 LBS OF 20/40 SLC SND. TOTAL PROP 99,823 LBS. SWI, X-OVER FOR WL PERF STG 3)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8899' P/U PERF F/8668'-69', 4 SPF, 4 HOLES. 8731'-33', 3 SPF, 6 HOLES. 8760'-62', 3 SPF, 6 HOLES. 8760'-62', 3 SPF, 6 HOLES. 8714'-15', 4 SPF, 4 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW. FRAC STG 3)WHP 2137 PSI, BRK 2908 PSI @ 4.7 BPM. ISIP 2327 PSI, FG .70. PUMP 100 BBLS @ 49.9 BPM @ 6091 PSI = 75% HOLES OPEN. ISIP 2719 PSI, FG .75, NPI 392 PSI.
								MP 6672 PSI, MR 51.3 BPM, AP 5276 PSI, AR 49.6 BPM, PMP 2411 BBLS SW & 90,168 LBS OF 30/50 SND 4,816 LBS OF 20/40 SLC SND. TOTAL PROP 94,984 LBS. SWI, X-OVER FOR WL. PERF STG 4)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8630' P/U PERF F/8598'-00', 4 SPF, 8 HOLES. 8537'-39', 3 SPF, 6 HOLES. 8517'-18', 4 SPF, 4 HOLES.
								8329'-31', 3 SPF, 6 HOLES. 24 HOLES. FRAC STG 4)WHP 1694 PSI, BRK 3051 PSI @ 4.7 BPM. ISIP 1802 PSI, FG .65. PUMP 100 BBLS @ 39.8 BPM @ 6365 PSI = 60% HOLES OPEN. ISIP 2477 PSI, FG .73, NPI 675 PSI. MP 6645 PSI, MR 52.4 BPM, AP 6192 PSI, AR 47
								BPM, PMP 911 BBLS SW & 29,290 LBS OF 30/50 SND & 4945 LBS OF 20/40 SLC SND. TOTAL PROP 34,235 LBS. SWI, X-OVER FOR WL.
3/19/2011	6:30 - 6:45	0.25	COMP	48		P		PERF STG 5)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8279' P/U PERF F/ 8244'-45', 4 SPF, 4 HOLES. 8164'-65', 4 SPF, 4 HOLES. 8132'-33', 4 SPF, 4 HOLES. 8114'-15', 3 SPF, 3 HOLES. 8074'-75', 4 SPF, 4 HOLES. 8054'-55', 4 SPF, 4 HOLES. 23 HOLES. POOH, SWIFN. HSM,

			O				REGION ary Repor	t
Well: NBU 92	1-25I4AS GREEN		Spud C	onductor	: 11/17/2	2010	Spud Date: 1	1/27/2010
Project: UTA				SU 921-2				Rig Name No: GWS 1/1
Event: COMP	PLETION		Start Da	ite: 3/15/	2011			End Date: 3/24/2011
Active Datum Level)	: RKB @5,005.00ft (above Mean	Sea	UWI: N	IE/SE/0/	9/S/21/E	//25/0/0/26/PM/S	S/2045/E/0/686/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	6:45 - 6:45	0.00	COMP	36	E	P		STG #5 MESAVERDE 8,054'-8,245' [23 HOLES] FRAC STG #5] WHP=1,800#, BRK DN PERFS=3,131#, @=4.5 BPM, INJ RT=50.8, INJ PSI=5,923#, ISIP=2,044#, FG=69, PUMP'D 1,618 BBLS SLK WTR W/ 59,951# 30/50 MESH W/ 4,979# RESIN COAT IN TAIL, 64,930# TOTAL PROP, ISIP=2,370#, FG=.73, AR=51, AP=4,844#, MR=51.7, MP=6,280#, NPI=326# 18/23 CALC PERFS OPEN. 77% PERF STG #6] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,035, PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 8,001'-8,005' 4 SPF, 90* PH, 16 HOLES. 7,811'-7,813' 4 SPF, 90* PH, 8 HOLES. [24 HOLES] FRAC STG #6] WHP=2,068#, BRK DN PERFS=3,454#, @=4.4 BPM, INJ RT=30, INJ PSI=5,639#, ISIP=2,735#, FG=.78, PUMP'D 658 BBLS SLK WTR W/ 18281# 30/50 MESH W/ 5,306# RESIN COAT IN TAIL, 23,587# TOTAL PROP. ISIP=2,254#, FG=.72, AR=37.6, AP=6,356#, MR=46.2, MP=6,721#, NPI=-481# 14/24 CALC PERFS OPEN. 60% PERF STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7,761, PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 7,723'-7,725' 4 SPF, 90* PH, 8 HOLES. 7,576'-7,578' 4 SPF, 90* PH, 8 HOLES. 7,576'-7,578' 4 SPF, 90* PH, 8 HOLES. 7,576'-7,478' 3 SPF, 120* PH, 6 HOLES. [22 HOLES] FRAC STG #7] WHP=577#, BRK DN PERFS=2,712#, @=4.6 BPM, INJ RT=49.8, INJ PSI=5,410#, ISIP=1,664#, FG=., PUMP'D 1971 BBLS SLK WTR W/ 74,901# 30/50 MESH W/ 5,513# RESIN COAT IN TAIL, 80,414# TOTAL PROP. ISIP=2,377#, FG=.73, AR=50, AP=4,344#, MR=50.3, MP=5,504#, NPI=713# 17/22 CALC PERFS OPEN. 79% P/U RIH W/ HALIBURTON 8K CBP, SET FOR TOP KILL @=7,426' TOTAL BBLS=10845 TOTAL SAND=419,284# 852 GALS SCALE INHIB.
3/23/2011	7:00 - 7:15	0.25	COMP	48		Р		213 GALS BIOCIDE HSM, SLIPS, TRIPS & FALLS, RIGGING UP & DOWN, GUY LINES.

8/23/2011 2:13:34PM

3

Well: NBU 921	1-25I4AS GREEN		Spud C	onductor	r: 11/17/2	2010	Spud Date: 11/27/2010
Project: UTAH	I-UINTAH		Site: NE	3U 921-2	5I PAD		Rig Name No: GWS 1/1
Event: COMPI	LETION		Start Da	ate: 3/15/	2011		End Date: 3/24/2011
Active Datum: Level)	RKB @5,005.00ft	(above Mean	Sea	UWI: N	1E/SE/0/	9/S/21/E/	E/25/0/0/26/PM/S/2045/E/0/686/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
	7:15 - 16:30	9.25	COMP	31	I	Р	RD OFF NBU 921-25i4DS, MIRU, ND WH, NU BOP, INSTAL CAGE OVER WH ON 25i4DS, RU FLOOR & TBG EQUIP, SPOT TBG TRAILER, TALLY & PU TBG TO 7,365', RU POWER SWIVEL, OPEN DOORS & CHECK RAM BLOCKS & RUBBERS ON BTM PIPE RAMS RUBBER WORN ON TOP & BTM OF RUBBER, WILL REPLACE AFTER THIS HOLE, PRESS TEST TO 3,000 PSI DOOR SEAL LEAKING, OPEN DOOR CHECK SEAL HAD A LITTLE SAND BEHIND IT, MAKE UP DOOR, PRESS TEST TO 3,000 PSI HELD OKAY, READY FOR D/O IN AM, SWI, SDFN.
3/24/2011	7:00 - 7:15	0.25	COMP	48		Р	HSM, SLIPS, TRIPS & FALLS, D/O PLUGS & LANDING TBG.

8/23/2011

Operation Summary Report

Well: NBU 921-25I4AS GREEN	Spud C	d Conductor: 11/17/2010 Spud Date: 11/2					7/2010	
Project: UTAH-UINTAH	BU 921-25I PAD					Rig Name No: GWS 1/1 End Date: 3/24/2011		
Event: COMPLETION	ate: 3/15/2011							
Active Datum: RKB @5,005.00ft (above Me	UWI: NE/SE/0/9/S/21/E/25/0/0/26/PM/S/2				6/PM/S/2	045/E/0/686/0/0		
Date Time Duratio	n Phase		Sub	P/U	The second second	rom	Operation	
Start-End (hr) 7:15 - 17:00 9.75	COMP	44	Code C	Р	<u>(f</u>	(OPEN WELL UP, BREAK CIRC, START DRLG PLUGS. ALL SURFACE CSG VAVLES OPEN TO ATMOSPHERE W/ LOCKS ON THEM.	
						I	C/O 25' SAND, TAG 1ST PLUG @ 7,426' DRL PLUG N 7 MIN. 500 PSI INCREASE RIH, CSG PRESS 0 PSI.	
						 	C/O 30' SAND, TAG 2ND PLUG @ 7,761' DRL PLUG N 6 MIN. 300 PSI INCREASE RIH, CSG PRESS 50 PSI. SURFACE CSG STARTED BURPPING A LITTLE LOOKED LIKE DRLG MUD THEN TURNED TO WATER.	
						ļ	C/O 20' SAND, TAG 3RD PLUG @ 8,035' DRL PLUG N 10 MIN. 400 PSI INCREASE RIH, CSG PRESS 100 PSI.	
						1	C/O 60' SAND, TAG 4TH PLUG @ 8,279' DRL PLUG N 14 MIN. 200 PSI INCREASE RIH, CSG PRESS 250 PSI.	
						1	C/O 25' SAND, TAG 5TH PLUG @ 8,630' DRL PLUG N 12 MIN. 400 PSI INCREASE RIH, CSG PRESS 250 PSI. FLOWLINE PLUGGED W/ PLUG PARTS.	
						 {	C/O 20' SAND, TAG 6TH PLUG @ 8,899' DRL PLUG N 12 MIN. 200 PSI INCREASE RIH, CSG PRESS 500 PSI. CRACK IN 3 1/2" X 2 3/8" XO ON BTM OF POWER	
						(SWIVEL HAD TO C/O. C/O 40' SAND, TAG 7TH PLUG @ 9,174' DRL PLUG N 10 MIN. 400 PSI INCREASE RIH, CSG PRESS 600 PSI.	
							PBTD 9,609', BTM PERF @ 9,440', TAGGED @ 9,530', 90' PAST BTM PERF, W/ 301 JTS 2 3/8" L-80 IBG, LD 19 JTS, PU & STRIP IN TBG HANGER & LAND TBG W/ 282 JTS 2 3/8" L-80, EOT 8,941.18'. SURFACE CSG QUIT BURPPING AFTER TBG WAS LANDED.	
						E	RD POWER SWIVEL, FLOOR & TBG EQUIP, ND BOPS, NU WH, DROP BALL TO SHEAR OFF TO SHEAR OFF BIT W/ 3,200 PSI, LET BIT FALL FOR 20 MIN.	
							TURN OVER TO FLOW BACK CREW. RD & MOVE TO NBU 921-25i2AS, SDFN.	
						2 1 2 1 6 6	KB= 25' 4 1/16" WEATHERFORD HANGER= .83' TBG DELIVERED 315 JTS 282 JTS 2 3/8" L-80 = 8,913.15' JSED 282 JTS POBS= 2.20' RETURNED 33 JTS EOT @ 8,941.18' SN @ 8,938.98'	
							TWTR= 10,928 BBLS TWR= 1,600 BBLS	

Operation Summary Report

 Well: NBU 921-25I4AS GREEN
 Spud Conductor: 11/17/2010
 Spud Date: 11/27/2010

 Project: UTAH-UINTAH
 Site: NBU 921-25I PAD
 Rig Name No: GWS 1/1

 Event: COMPLETION
 Start Date: 3/15/2011
 End Date: 3/24/2011

Active Datum: RKB @5,005.00ft (above Mean Sea UWI: NE/SE/0/9/S/21/E/25/0/0/26/PM/S/2045/E/0/686/0/0

Level)											
Date	Time Start-E		Duration (hr)	Phase	Code	Sub Code	P/U MD From Operation (ft)				
							TWLTR= 9,328 BBLS CALLED CDC TALKED TO BOBBY				
	14:20 - 1	14:20	0.00	PROD	50		WELL TURNED TO SALES @ 1420 HR ON 3/24/11-1400 MCFD, 1920 BWPD, FTP 150, CP 2400#, CK 20/64"				
3/25/2011	7:00 -				33	Α	7 AM FLBK REPORT: CP 3000#, TP 2400#, 20/64" CK, 65 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 2744 BBLS LEFT TO RECOVER: 8184				
3/26/2011	7:00 -				33	Α	7 AM FLBK REPORT: CP 3400#, TP 2450#, 20/64" CK, 52 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 4056 BBLS LEFT TO RECOVER: 6872				
3/27/2011	7:00 -				33	Α	7 AM FLBK REPORT: CP 3200#, TP 2400#, 20/64" CK, 42 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 5142 BBLS LEFT TO RECOVER: 5786				
3/28/2011	7:00 -				33	Α	7 AM FLBK REPORT: CP 3000#, TP 2250#, 20/64" CK, 28 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 5896 BBLS LEFT TO RECOVER: 5032				
3/30/2011	7:00 -				50		WELL IP'D ON 3/30/11 - 3712 MCFD, 0 BOPD, 604 BWPD, CP 3000#, FTP 1998#, CK 20/64", LP 148#, 24 HRS				

8/23/2011

BLM - Vernal Field Office - Notification Form

Ope	rator <u>KERR-McGEE OIL & GA</u>	<u>\S</u> Rig Name/# <u>BUC</u>	KETRIG					
Subr	nitted By ANDY LYTLE	Phone Number 720	.929.6100					
	Name/Number NBU 921-251		·					
	Qtr NESE Section 25		Range <u>21E</u>					
_	se Serial Number <u>UO-0868 S</u>							
	Number 4304751271							
-	d Notice – Spud is the initial below a casing string.	spudding of the we	ell, not drilling					
	Date/Time <u>11/18/2010</u>	08:00 HRS AM	PM 🗌					
<u>Casi</u> time	ng – Please report time cas s.	ing run starts, not c	ementing					
\checkmark	Surface Casing	F	RECEIVED					
	Intermediate Casing	•	NOV 1 5 2010					
	Production Casing							
	Liner Other	DIV.	OF OIL, GAS & MINING					
	Other							
	Date/Time <u>12/09/2010</u>	08:00 HRS AM	РМ 🔲					
ВОР	F							
	Initial BOPE test at surface casing point							
Ħ	BOPE test at intermediate	• .						
	30 day BOPE test	<u>-</u> .						
	Other							
	Date/Time	AM [РМ					
Rem	arks estimated date and time. PLEA	ASE CONTACT KENNY GATHINGS	AT					
435 82	8 0986 OR LOVEL YOUNG AT 435.781.70	51						